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WATER RIGHTS

IN THE

WESTERN STATES.

THE LAW OF APPROPRIATION OF WATER AS APPLIED ALONE IN SOME JURISDICTIONS, AND AS APPLIED TOGETHER WITH THE COMMON LAW IN OTHERS. FEDERAL AND CALIFORNIA STATUTES IN FULL. WITH SYNOPSIS OF STATUTES OF ARIZONA, COLORADO, IDAHO, KANSAS, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, OREGON, SOUTH DAKOTA, TEXAS, UTAH, WASHINGTON, WYOMING AND PHILIPPINE ISLANDS. FORMS.

BY

SAMUEL C. WIEL,

Of the San Francisco Bar.

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BY

SAMUEL C. WIEL.

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PREFACE.

The writer first approached this subject from an interest in mining, having published a series of articles giving a statement of the law of waters from that point of view. For a considerable time in the West the decisions on mining and waters had been closely interwoven, and that point of view was probably the best for reaching the underlying principles on which the Western law of waters rests. The present book attempts a more general treatment of the subject, covering also the recent developments of the law resulting from irrigation throughout the West. In view of the great interest in the subject since the passage of the National Irrigation Act, it is hoped that the present book will be of some use.

S. C. W.

San Francisco, November, 1905.

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WATER RIGHTS

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WESTERN STATES.

The relation of the law of waters to practical irrigation is a matter of great importance. The writer has undertaken to state the law as it is. Engineers in the field, however, largely believe that the law as it has been worked out by the slow and laborious process of court decision (spread through many books where it is not easily found, and taking shape largely from the conservative attitude of the courts in their desire to protect vested rights) does not adequately meet the requirements of the present energetic prosecution of irrigation works by many new methods.

This attitude of the hydraulic engineers has largely led to the recent irrigation code legislation set forth in Appendix B. As there stated, a draft of a State Irrigation Code was prepared by Mr. Morris Bien, head of the Legal Department of the United States Reclamation Service, at the direct solicitation of commissioners appointed by the Governors of Washington and Oregon. His draft was substantially adopted in 1905, in other States and Territories, as elsewhere set forth.

The writer requested Mr. Bien to present to the readers of this book a general view of the objects sought in the irrigation code legislation, and in reply received the following letter, which the writer considers it a privilege to be able to include.

DEPARTMENT OF THE INTERIOR.

UNITED STATES GEOLOGICAL SURVEY.

RECLAMATION SERVICE.

Washington, D. C., November 1, 1905.

Mr. Samuel C. Wiel,

Dear Sir:

I am in receipt of yours of October 21, 1905, requesting a statement of views concerning the recent irrigation legislation in the States and Territories of the West. My understanding is that you desire an expression concerning the relation of these enactments to the engineering side of irrigation.

In regard to the general features of this subject, the most important matter of interest to the engineer is that the adjudications of the courts upon the subject of water rights should bear a closer relation to the physical conditions than was the case until within recent years, and even now there are frequent decisions which do not take fully into account the facts regarding water supply and the needs of the irrigators.

The principal advance in recent years in irrigation legislation has been a tendency to provide the supervision of persons technically qualified on the engineering side, in the appropriation, adjudication and distribution of water.

The earliest practice in the arid region permitted appropriators to put of record such claims to the water supply as they deemed advisable. The natural tendency was to make the claim large enough to cover all possible future development of their plans. This led

in many instances to speculative claims and numerous cases are of record where each of a number of claims to the water of a stream filed in pursuance of the State statute involved a larger quantity of water than had ever flowed in it even in times of greatest flood.

When questions concerning such a stream came before the courts for adjustment the record would show claims to the use of water far in excess of any possible supply in connection with expert testimony (much of it was unreliable) as to the quantity of water available. In addition to this there would be much testimony on behalf of the parties to the proceeding tending to show the needs of crops as far in excess of the requirements of reasonable use.

As a result, the courts have decreed to the various claimants rights to the use of water which could by no possibility be obtained from the stream because the water was not there. These decrees have therefore left matters in but little better shape than they were before, and the parties have often been required to agree among themselves as to the partition of the water supply, following these decrees only in a general way, as an alternative to further expensive litigation.

In most of the recent legislation provision is made for a State Engineer who shall carefully examine all applications for water rights and attempt to keep such applications within some reasonable relation to the amount of water available. He is required also from time to time to make hydrographic surveys, measuring the water supply in the streams and the amounts used for irrigation and other purposes. These investigations are used for the purpose of adjudicating the claims to water already of record and with a resulting determination of the amount of unappropriated water available for further application.

In this way the States having legislation of this character propose to adjust accurately all claims of record and to regulate the filing of future claims.

The investigations of the State Engineer as to the water which is used are ultimately to form the basis of an adjustment of the rights of all parties by the courts. In some States there is an intermediate step providing for an adjustment by a State tribunal which is final in case there is no appeal to the judicial branch.

The water claimed under adjudication by the courts or under filings of record is distributed by State officers usually appointed by the State Engineer. The distribution is therefore, in a similar way, under the supervision of persons technically qualified to measure the water supply who become thoroughly familiar with the rights of all parties in the districts under their charge and who are thus qualified to distribute the water to the best advantage avoiding a condition which has often existed, of a waste in the use of water in one portion of a stream system and a corresponding shortage in another.

In addition to this, the legislation often provides a minimum duty of water, namely, that the unit of water supply shall be utilized for the irrigation of not less than a given number of acres. This legislative declaration of the duty of water would naturally be a guide to the courts in their adjudications and prevent the decree of excessive quantities of water, of which so many instances are of record.

The gratifying feature of nearly all recent legislation is the recognition of the logical underlying principles of the use of the waters in the Western States and Territories, a principle which is concisely stated in section 8 of the Act of Congress approved June 17, 1902 (32 Stat., 388), known as the Reclamation Act: "That the

right to the use of water * * * shall be appurtenant to the land irrigated and beneficial use shall be the basis, the measure and the limit of the right."

The idea that all rights to the use of water shall be founded upon beneficial use is of course as fully applicable to mining, power, manufacturing and all other beneficial purposes, as to irrigation.

The application of this principle to future legislation of the various States and Territories in which irrigation is practiced cannot fail to bring about a more satisfactory condition in this respect and eliminate from enterprises depending upon the use of water the doubts as to the legal status of water rights and the great expense due to litigation resulting from these uncertainties.

The interest of the engineer in this legislation is of primary importance, as he finds it a great handicap in the designing of economical and efficient hydraulic structures when the amount of water which may be available for use therein is undetermined. The question in fact involves engineering considerations fully as much as, if not more than, those of a legal nature, and the outlook for future legislation is the more satisfactory because legislators have begun to recognize the hydraulic engineer as a necessary factor in the appropriation, adjudication and distribution of rights to the use of water.

Very respectfully,

MORRIS BIEN,
SUPERVISING ENGINEER,
U. S. RECLAMATION SERVICE.

TABLE OF CONTENTS.

Preface iii
Purpose of Legislation—Mr. Morris Bien v
Table of Cases xxiii

CHAPTER I.

HISTORICAL REVIEW.

A. ORIGIN OF THE DOCTRINE OF APPROPRIATION.

§ 1. California before the arrival of pioneers.
§ 2. Mexican law.
§ 3. Customs of miners.
§ 4. The customs and the court.
§ 5. Irwin v. Phillips.

B. DEVELOPMENT OF THE DOCTRINE.

§ 6. Irwin v. Phillips followed.
§ 7. Was this new rule to be made to conform to the common law of riparian rights?
§ 8. Was this judicial legislation?
§ 9. How far applicable to other pursuits than mining?

C. EARLY LEGISLATION.

§ 10. Federal statutes of 1866 and 1870.
§ 11. Comments on these Federal statutes.
§ 12. State legislation in California.

D. THE CONFLICT OVER RIPARIAN RIGHTS.

§ 13. Private title to land and new industries.
§ 14. The law and irrigation.
§ 15. Riparian rights before Lux v. Haggin.
§ 16. Lux v. Haggin.
§ 17. Result of Lux v. Haggin.
§ 18. Principle of Lux v. Haggin approved in nine States.
§ 19. Principle of Lux v. Haggin rejected in seven States.

E. LATER AND RECENT LEGISLATION.

§ 20. Irrigation codes.
§ 21. Irrigation districts.
§ 22. Statement of the doctrine of appropriation.

CHAPTER II.

NATURE OF THE RIGHT OF APPROPRIATION.

A. RELATION TO THE GOVERNMENT.

§ 23. The United States or the State—California system.
§ 24. Appropriation as a grant under this system.
§ 25. The United States or the State—Colorado system.
§ 26. Comments on the Colorado view.
§ 27. Summary.

B. RELATION TO OTHER APPROPRIATORS.

§ 28. Priority governs.
§ 29. Successive appropriations.
§ 30. Periodical appropriations.
§ 31. Temporary appropriations.
§ 32. No partiality.

C. RELATION TO RIPARIAN PROPRIETORS.

§ 33. To subsequent settlers.
§ 34. To prior settlers.
§ 35. Prior settlers who hold the land in fee.
§ 36. Prior settlers before patent.
§ 37. Conclusion.

D. CHARACTERISTICS.

§ 38. The right is usufructuary.
§ 39. No property in the "*corpus*" of the water.
§ 40. No property in the channel.
§ 41. The right is exclusive.
§ 42. Independent of ownership or possession of land.

§ 43. Distinguished from right to a ditch.
§ 44. It is real estate.
§ 45. It is conditional.
§ 46. It is an incorporeal hereditament.
§ 47. Definition.

CHAPTER III.

WHO CAN APPROPRIATE.

§ 48. Persons in general.
§ 49. Tenants in common.
§ 50. Riparian owners.
§ 51. Corporations.

CHAPTER IV.

WHERE AN APPROPRIATION CAN BE MADE.

A. ON PUBLIC LAND.

§ 52. The first appropriations were all on public land.
§ 53. Revised Statutes of the United States.
§ 54. State lands.
§ 55. Presumption that lands are public.

B. ON PRIVATE LAND.

§ 56. In general, not allowed.
§ 57. Healy v. Woodruff.
§ 58. Cave v. Tyler.
§ 59. Hostile appropriation.
§ 60. With consent of the landowner.
§ 61. By the landowner himself.
§ 62. Review of decisions.

C. RECAPITULATION.

§ 63. Principles stated.

CHAPTER V.

WHAT CAN BE APPROPRIATED.

A. SURFACE WATER.

§ 64. Water in a surface watercourse.
§ 65. What constitutes a watercourse.
§ 66. Navigable streams.
§ 67. Interstate streams.
§ 68. Artificial watercourses.
§ 69. Diffused surface water.
§ 70. Lakes and ponds.
§ 71. Swamp lands.

B. UNDERGROUND WATER.

§ 72. In general.
§ 73. Definite underground streams.
§ 74. The sub-flow of a stream.
§ 75. Sub-flow defined.
§ 76. Sub-flow may be appropriated.
§ 77. Percolating water.
§ 78. Percolating water may be appropriated.
§ 79. Underground reservoir.
§ 80. Effect of the new rule.

CHAPTER VI.

HOW AN APPROPRIATION IS MADE—IN CALIFORNIA AND STATES THAT HAVE NOT ADOPTED IRRIGATION CODES.

§ 81. Introductory.
§ 82. Origin of this method.
§ 83. Ownership of land not needed.

A. BY ACTUAL DIVERSION.

§ 84. Distinguished from the Civil Code method.
§ 85. The Civil Code does not apply.
§ 86. Examples.
§ 87. Mere settlement on land not enough.

B. TO SECURE THE BENEFIT OF RELATION.

§ 88. Object of Civil Code provisions.
§ 89. Civil Code provisions chiefly declaratory only.

C. NOTICE.

§ 90. Form of notice.
§ 91. Purpose of notice.
§ 92. The notice operates as a warning.
§ 93. Failure to post notice.
§ 94. Notice alone not enough.
§ 95. Notice in appropriating underground water.

D. BENEFICIAL PURPOSE.

§ 96. What constitutes a beneficial purpose.
§ 97. Motive.
§ 98. Evidence of intention.
§ 99. Intention alone not enough.

E. DILIGENCE.

§ 100. Must be diligence in prosecuting construction work.
§ 101. What constitutes diligence.
§ 102. Failure to use diligence.

F. COMPLETION OF CONSTRUCTION WORK.

§ 103. Completion of work.
§ 104. What amounts to completion.
§ 105. Mere diversion.
§ 106. Changes in course of construction.

G. RELATING BACK.

§ 107. Origin of the doctrine.
§ 108. Effect of relation.
§ 109. Actual application.
§ 110. Recapitulation.

CHAPTER VII.

HOW AN APPROPRIATION IS MADE—IN STATES ADOPTING IRRIGATION CODES.

§ 111. Introductory.
§ 112. Application for permit.
§ 113. Examination of application and issuance of permit.
§ 114. Prosecution of the work.
§ 115. Issuance of certificate of appropriation.
§ 116. Relation.
§ 117. Measurement of water.

CHAPTER VIII.

LIMITATIONS ON EXERCISE OF THE RIGHT.

§ 118. Introductory.

A. LIMITATIONS ARISING OUT OF NATURE OF RIGHT.

§ 119. Nature of the right.
§ 120. Contracts in general concerning water rights.
§ 121. Conveyances.
§ 122. Appurtenance.
§ 123. Parol sale.
§ 124. Usefulness and continuance of use.

B. LIMITATIONS ON MANNER OF USE.

§ 125. In general.
§ 126. Change of means of use.
§ 127. Wastefulness.
§ 128. Use in artificial watercourse—Ditches, flumes, etc.
§ 129. The ditch, etc., is an easement.
§ 130. Ditch and water right distinguished.
§ 131. Water in artificial watercourse is personalty.
§ 132. The law of natural waters does not apply to artificial watercourses.
§ 133. Natural dry ravines as artificial watercourse.
§ 134. Changes in ditches, etc.
§ 135. Repair of ditches.
§ 136. Damage from breaking ditches, etc.
§ 137. Contracts concerning ditches.

C. LIMITATIONS ON QUANTITY OF WATER.

§ 138. Introductory.
§ 139. No more than originally claimed.
§ 140. No more than capacity of ditch.
§ 141. No more than actually used.
§ 142. Whole stream.
§ 143. Where no other claimants.
§ 144. Preferences and pro-rating.
§ 145. Appropriations for future needs.
§ 146. Same.
§ 147. Summary.

D. LIMITATIONS ON CHANGE OF PLACE OR PURPOSE.

§ 148. What constitutes a proper place or purpose.
§ 149. No injury to others.
§ 150. Change of place of diversion or use.
§ 151. Change of purpose.

CHAPTER IX.

PROTECTION OF THE RIGHT.

A. GENERAL PRINCIPLES.

§ 152. Introduction.
§ 153. Materiality of injury is the test.
§ 154. Later land grants all subject to prior appropriations.

B. INJURY TO QUANTITY.

§ 155. General rules.
§ 156. Surplus.
§ 157. Injury from diversion by percolation.
§ 158. Diversion by percolation under the recent decisions.
§ 159. The question of motive.
§ 160. Importance in mining regions.

C. INJURY TO QUALITY.

§ 161. Materiality of injury is the test.
§ 162. Examples.
§ 163. Mining debris.
§ 164. Priority.

D. PROCEDURE.

§ 165. Who can sue.
§ 166. Where suit can be brought.
§ 167. Injunction.
§ 168. Actions at law.
§ 169. Actions to quiet title.
§ 170. Pleading.
§ 171. Use of physical force.
§ 172. Crimes.

CHAPTER X.

SUPERVISION OF APPROPRIATORS—IN STATES ADOPTING IRRIGATION CODES.

§ 173. Introductory.
§ 174. Supervision of State.
§ 175. Intermediate subdivisions.
§ 176. Primary subdivisions.
§ 177. Police regulations.

CHAPTER XI.

ADJUSTMENT OF EXISTING PRIORITIES—IN STATES ADOPTING IRRIGATION CODES.

§ 178. Introductory.

A. BY THE BOARD OR STATE ENGINEER.

§ 179. Preparatory steps.
§ 180. Procedure.
§ 181. Certificate.

B. BY DECREE OF COURT.

§ 182. Preparatory steps.
§ 183. Procedure on suit.
§ 184. Decree and certificate.

CHAPTER XII.

LOSS OF RIGHT.

§ 185. Introductory.

A. ABANDONMENT.

§ 186. Abandonment is voluntary and a question of fact.
§ 187. Recapture.
§ 188. Parol sale or faulty deed.
§ 189. Failure of diligence in construction work.
§ 190. Non-user.
§ 190a. Same.
§ 191. Discharged waste.

B. FORFEITURE.

§ 192. Failure to comply with statute in making an appropriation.
§ 193. Smith v. Hawkins.
§ 193a. Forfeiture under irrigation codes.

C. ADVERSE USE.

§ 194. In general.
§ 195. No need of statutory appropriation.
§ 196. Use of water for a beneficial purpose.
§ 197. Continuous for five years.
§ 198. Hostile invasion of right of true owner.
§ 199. Open and "not clam."
§ 200. Chance to prevent.
§ 201. Uninterrupted.
§ 202. Payment of taxes.
§ 203. Against the United States.
§ 204. Conclusion.

D. ESTOPPEL.

§ 205. Estoppel.

E. EMINENT DOMAIN.

§ 206. Eminent domain.

CHAPTER XIII.

THE COMMON LAW OF RIPARIAN RIGHTS.

§ 207. Appropriation and the common law.
§ 208. Riparian rights under the California doctrine.

A. NATURE OF RIPARIAN RIGHT.

§ 209. Part and parcel of riparian land—Not an easement.
§ 210. Usufructuary solely.
§ 211. May be sold or be the subject of contract.

B. WHAT SUBJECT THERETO.

§ 212. In general.
§ 213. Underground streams.
§ 214. Percolating water under recent decisions.

C. LIMITATIONS ON USE OF WATER.

§ 215. In general.
§ 216. Natural uses.
§ 217. Artificial uses.
§ 218. Apportioning.
§ 219. Cannot be used on non-riparian land.
§ 220. Return of surplus.
§ 221. Manner of use.

D. PROTECTION OF THE RIGHT.

§ 222. In general.
§ 223. Diminution, acceleration, pollution.
§ 224. Form of remedy.
§ 225. Pleading.

E. LOSS OF RIGHT.

§ 226. No abandonment.
§ 227. Adverse use.
§ 228. Eminent domain.
§ 229. By natural causes.

F. DISTINCTION FROM APPROPRIATION.

§ 230. Distinctions recapitulated.
§ 231. Change of attitude toward appropriation in California.

APPENDIX A.

Federal Statutes, p. 309.
California Statutes, p. 316.

APPENDIX B. STATE STATUTES.

Scope and Purpose of Statutes, p. 331.
Arizona, p. 334.
Colorado, p. 335.
Idaho, p. 339.
Kansas, p. 346.
Montana, p. 347.
Nebraska, p. 348.
Nevada, p. 353.
New Mexico, p. 361.
North Dakota, p. 363.
Oklahoma, p. 367.
Oregon, p. 370.
South Dakota, p. 373.
Texas, p. 377.
Utah, p. 378.
Washington, p. 406.
Wyoming, p. 407.
Philippine Islands, 410.

APPENDIX C. FORMS.

California, p. 413.
Colorado, p. 415.
Idaho, p. 425.
Nebraska, p. 449.
Nevada, p. 460.
North Dakota, p. 468.
Utah, p. 485.
Wyoming, p. 500.
Plat used in Nevada, p. 515.
Plat used in Nebraska, p. 516.
Township Plat, p. 516.
Index, p. 517.

TABLE OF CASES.

	Page
Abila, Directors v.	45
Abbott v. Pond	189
Abbott, Taylor v. 76, 103, 106, 141,	151
Abel v. Love	92
Acme Oil Co., Dillon v.	239
Acton v. Blundell 225, 227,	231
Adams, Jones v. 57, 76,	298
Adams v. Modesto	123
Adams, North American Exploration Co. v. 181,	268
Agasse, Oliver v. 192,	199
Ager, Joseph v. 192,	199
Agricultural Ditch Co., Farmers' Independent Ditch Co. v.	257
Ahern, People v.	122
Albuquerque etc. Co. v. Gutierres 22, 26, 95,	240
Albuquerque etc. Co., Gutierrez v.	38
Alhambra etc. Co., Mayberry v. 87, 192, 193,	265
Alhambra etc. Water Co. v. Richardson 278,	281
Aliso etc. Co. v. Baker	286
Allaman, Clark v. 32,	37
Allen v. Flood	228
Allen v. San Jose etc. Co. 192,	199
Allen v. Stowell	245
Alessandro Irr. Dist., People v.	45
Allouez, Edwards v.	244
Alston v. Grant	239
Alta etc. Co. v. Hancock 37, 78, 278, 279, 280, 296, 297, 299,	303
Altoona etc. Co., Integral etc. Co. v. 192, 268,	276
Amador etc. Co., Hobbs v.	236
Amador Canal etc. Co., Mitchell v. 89, 157,	181
American etc. Co. v. Bradford 224, 278, 280, 282,	283
Annuity etc. Co. v. Lamar etc. Co.	54
Anaheim etc. Co. v. Semi-Tropic etc. Co. 92, 154, 196, 271,	301
Anaheim etc. Co., Rincon etc. Co. v. 150,	248
Anderson, Senior v. 70, 71, 76, 93, 100, 106, 140, 141, 155, 162, 165, 181, 191, 204, 205, 210, 224, 246, 267,	279
Argile, Promontory etc. Co. v.	277
Arkwright v. Gell 196,	271
Armstrong, New Mercer etc. Co. v. 210, 211,	263
Arnett v. Linhart	181
Arnold v. Passavont 210,	212
Arrowhead etc. Hotel Co., Conrad v. 238,	239
Ashley, Brown v.	242
Askew, McDonald v. 83,	180
Atchison v. Peterson 11, 15, 21, 220, 223, 234,	245
Austin v. Chandler 38,	334
Anthors v. Bryant	246
Azusa Irr. Co., Vineland Irr. Dist. v. 125, 126, 128, 129, 135, 152, 217, 226,	413
Azuza etc. Co., Fuller v.	293
Bachman v. Meyer	122
Baker, Aliso etc. Co. v.	286
Baker, Brown v.	111
Baldwin, Los Angeles v.	83
Baldwin, Strong v. 205,	248
Baldwin, Weill v.	202
Balfour v. Fresno Irr. Co.	179
Ball v. Kehl 103, 195, 197, 224, 271,	280
Ballard v. Tomlinson	239
Barker v. Gould 125,	127
Barker, Higgins v. 70, 215,	224
Barkley v. Tieleke 53, 184,	188
Barnard v. Shirley	239
Barneich v. Mercy 190,	271
Barnes v. Glide	123

Page
Barnes v. Sabron 73, 76, 113, 205, 210, 241
Barnum v. Hostetter 247
Barrows v. Fox 70, 79, 190, 191, 199, 201, 205, 206, 224, 291, 333
Bartholomew, Kirk v. 208
Basey v. Gallagher 11, 15, 21, 26, 74, 155
Bathgate v. Irvine 37, 78, 79, 106, 280, 292, 299, 300, 302, 303
Baudry, McCrary v. 286
Baugh, Wheatley v. 232
Baumann, Churchill v. 293
Baxter v. Gilbert 37, 78, 79, 121
Baxter v. Vineland Irr. Dist. 45
Beam, Schwab v. 143, 335
Bean, Morris v. 118
Bean v. Stoneman 192, 199, 201, 205
Bear Lake etc. Co. v. Garland 22
Bear River Co. v. Boles 74, 247, 268
Bear River Co., Campbell v. 202
Bear River etc. Co., McDonald v. 11, 17, 70, 204, 215, 219, 224, 248
Bear River etc. Co. v. New York etc. Co. 7, 220, 234, 236, 305
Bear River etc. Co., Wixon v. 17, 34, 74, 236
Beaver etc. Co. v. St. Vrain etc. Co. 208, 269
Beck, Sturr v. 21, 37, 65, 78, 80, 106
Becker v. Marble Creek etc. Co. 204, 212
Bed Rock etc. Co., Bell v. 268
Beers v. Sharpe 280
Bell v. Bed Rock etc. Co. 268
Bell, Hicks v. 8
Benicia etc. Co., Clyne v. 181
Bennett, Nevada etc. Co. v. 86, 181, 210
Benton, Crooker v. 181
Benton v. Johncox 37, 62
Bergin, Junkans v. 70, 217, 224, 235
Beyers v. Colonial etc. Co. 217
Bicknell, Maeris v. 70, 91, 151, 161, 216, 218
Bigelow v. Draper 37
Big Four etc. Co., Oviatt v. 157
Big Horn Basin etc. Co., Howell v. 202
Page
Big Rock etc. Co., Boehmer v. 299
Bird, Dick v. 153
Bird, Packer v. 116
Bixler's Appeal 122
Bixler v. Board of Supervisors 122
Black v. Elkhorn M. Co. 184, 189, 265
Black Diamond Coal Co., Robison v. 236
Blackman, Hall v. 210, 211, 284
Black, McKeaney v. 83
Blair, City of Telluride v. 73
Blake, Heynemann v. 94, 195
Blankenship v. Whaley 183
Bledsoe v. Decrow 162, 190, 205, 246
Bliss v. Kennedy 290
Bliss v. Kingdom 193
Blundell, Acton v. 225, 227, 231
Board of Supervisors, Bixler v. 122
Board of Supervisors, Cosner v. 122
Board of Supervisors, Ferran v. 122
Board of Supervisors, Hagar v. 44, 122
Board of Supervisors, Ralston v. 122
Board of Supervisors v. Thompson 46
Board of Supervisors, Williams v. 122
Boehmer v. Big Rock etc. Co. 299
Boggs v. Merced Mining Co. 17, 196
Boise City Co., Hurd v. 181
Boise City etc. v. Stewart 61, 195
Boles, Bear River Co. v. 74, 247, 268
Bolter v. Garrett 284
Booth v. Chapman 83, 180
Booth, Modoc etc. Co. v. 37, 78, 79, 242, 291, 302
Boarda, People v. 250
Boskowitz v. Thompson 45
Boston Dock Co., Gould v. 290
Bowker, Dalton v. 293
Boyle, Foreman v. 247
Boynton v. Longley 121
Bradford, American Co. v. 224, 278, 280, 282, 283

Page
Bradley, Fallbrook Irr. Dist. v. 46, 286
Bradley v. Harkness 92
Brandon, Rialto Irr. Dist. v. 45
Bree v. Wheeler 282
Bricknell, Maeris v. 151, 154
Broder v. Natoma Water Co. 21, 25, 76, 97
Brown v. Ashley 242
Brown v. Baker 111
Brown v. Illius 239
Brown, McGuire v. 37, 76, 78, 80, 83, 103, 106, 160, 188, 195, 217, 263
Brown v. Mullin 197, 224
Brown v. People's Ditch Co. 200
Brown v. Smith 207, 224
Brown, Strait v. 124, 130, 226
Brown Valley Irr. Dist., People v. 45
Bruce v. Delaware etc. Canal Co. 242
Bryant, Authors v. 246
Buckers etc. Co., Platte etc. Co. v. 127
Bumpus, Stone v. 155, 189, 196, 224, 236, 271
Bunker Hill etc. Co., Last Chance etc. Co. v. 197, 218, 272
Bunkers etc. Co. v. Farmers' etc. Co. 129
Burbank v. West Walker River Ditch Co. 203
Burdge v. Smith 98
Burdge v. Underwood 18
Burger, Reclamation Dist. v. 123
Burnett v. Whitesides 254
Burris v. People's Ditch Co. 192
Burrows, Burrows v. 76, 141, 143, 165
Burson, Southside etc. Co. v. 73, 211, 217
Butler, County of Sierra v. 236
Butte etc. Co., Miles v. 86, 166
Butte etc. Co. v. Morgan 217, 249
Butte etc. Co., Talbot v. 280
Butte etc. Co. v. Vaughn 84, 220, 234, 264, 265, 272
Buzzard, Hayes v. 86

Caldwell, Dick v. 153
Caldwell, Wholley v. 85, 304
California Pastoral Co. v. Whitson 123
California etc. Co. v. Enterprise etc. Co. 302
Calkins, Cordoz v. 151, 152
Campbell v. Bear River Co. 202
Campbell, Kaler v. 93
Campbell v. West 192
Canal Co., Mitchell v. 141
Cannovan, Keane v. 276
Cardelli v. Comstock etc. Co. 196, 198
Cardwell v. Sacramento 116
Carpenter, Farm Inv. Co. v. 62, 64, 252, 256
Carpenter, Ophir etc. Co. v. 157, 158, 205
Carroll, Leggat v. 143, 144
Carrota, Green v. 195, 196
Carson v. Gentner 37, 54
Carter, McShane v. 181, 182
Cave v. Crafts 154, 182, 204, 246, 282, 283
Cave v. Tyler 93, 96, 97, 98, 100, 107, 109, 110, 280, 303
Central etc. Co., Platte etc. Co. v. 269
Central Irr. Dist. v. De Lappe 44
Central Irr. Dist., In re 45
Central Pac. Ry., Consolidated etc. Co. v. 287
Chandler, Austin v. 38, 334
Chapman, Booth v. 83, 180
Chapman, Tuolumne etc. Co. v. 242, 245
Charnock v. Higuerra 190, 217, 246, 300
Chasemore v. Richards 225, 228, 290
Chauvet v. Hill 282, 296, 300
Chew, Esmond v. 70, 236
Chew, Fort Lyon Co. v. 180
Chiatovich v. Davis 185
Chidester v. Consolidated Ditch Co. 202
Churchill v. Baumann 293
Church, Womersley v. 239
City of Oakland, People ex rel. Cuff v. 123
City of Santa Cruz v. Enright 107
City of Telluride v. Blair 73
Clare v. Sacramento Electric etc. Co. 123
Clark v. Allaman 32, 37
Clark v. Lawrence 239
Clark v. Willett 191, 241, 242
Clear etc. Works, Moore v. 241, 281
Clements, Watkins etc. Co. v. 37
Cleveland, Wilson v. 268

	Page
Cloke, Yuba Co. v.	155, 236
Clough, Cox v.	278, 282
Clough v. Wing	38, 58, 334
Clyne v. Benicia etc. Co.	181
Cochell, Todd v.	202
Coffey, Meng v.	30
Coffin v. Left Hand Ditch Co.	38, 57
Coghill, People v.	122
Coghill, Reclamation Dist. No. 124 v.	122
Cohen v. La Canada Water Co.	113, 130, 226, 233, 295
Coleman v. Le Franc	190
Cole v. Richards Irr. Co.	38, 121
Colimas, Pico v.	201
Colonial etc. Co., Beyers v.	217
Colorado, Kansas v.	21, 119, 129, 241
Colorado Springs, Strickler v.	217
Compton, Hicks v.	242
Comstock T. Co. v. Cardelli v.	196, 198
Conant v. Deep Creek etc. Co.	119
Conger v. Weaver	13, 34, 52, 70, 75, 89, 139, 145, 149, 151, 162
Conger, Weaver v.	74
Conkling v. Pacific etc. Co.	80, 241, 281
Conners, Ogburn v.	120
Conrad v. Arrowhead etc. Hotel Co.	238, 239
Conradt v. Hill	181, 282
Consolidated etc. Co. v. Central Pac. Ry.	287
Consolidated Ditch Co., Chidester v.	202
Cook, Hargrave v.	37, 78, 196, 215, 217, 219, 271, 303
Copper etc. Co. v. Wabash etc. Co.	230
Corbley, Norman v.	280
Corbitt, Smith v.	181, 182, 215, 217, 296, 298
Cordoza v. Calkins	151, 152
Correa v. Frietas	103, 155, 196, 271
Cosner v. Board of Supervisors	122
County of Sierra v. Butler	236
County of Yuba v. Cloke	236
County of Yuba v. Kate Hayes etc. Co.	236
Cowels v. Kidder	290
Cowper, Cucker v.	289
Cox v. Clough	278, 282
Crafton Water Co., Craig v.	116, 246
Crafts, Cave v.	154, 182, 204, 246, 282, 283
Craig v. Crafton Water Co.	116, 246
Crall v. Poso Irr. Dist.	44
Crandall v. Woods	11, 33, 35, 37, 78, 80, 81, 143
Crane, Hughson v.	45
Crane, Lakeside Ditch Co. v.	196, 246, 271
Crane v. Winsor	153
Crary, Yankee Jim etc. Co. v.	88, 180, 278
Crawford v. Hathaway	13, 35, 37, 42, 348
Creary, Dougherty v.	196, 270, 271
Creighton v. Evans	241, 281
Creighton v. Kaweah Co.	196
Crescent Canal Co. v. Montgomery	94, 95, 216
Crippen v. White	335
Crooker v. Benton	181
Cross v. Kitts	124, 135, 229
Crow, Waring v.	275, 276
Cruse v. McCauley	52, 62, 80
Cucker v. Cowper	289
Cullen v. Glendora Water Co.	45
Cummings, McDaniel v.	120
Cummings, Payne v.	181, 182
Cunningham, O'Keiffe v.	238
Curtis, De Necochea v.	76, 91, 140, 141, 142, 145, 146, 148, 152, 157, 159
Cyclone Ditch Co. v. Lone Tree Ditch Co.	37
Dalton v. Bowker	293
Dangberg, Union etc. Co. v.	46, 70, 74, 80, 185, 204, 205, 210, 211, 246, 280
Davis, Chiatovich v.	185
Davis v. Gale	91, 215, 217, 219, 220, 263, 264, 270, 282
Day, Jacob v.	76, 192, 193, 199, 238
De Barker v. Southern Cal. Ry. Co.	224
Decker, Willey v.	29, 32, 37, 38, 55, 60, 78, 86, 118, 119, 194, 240
Decrow, Bledsoe v.	162 190, 205, 246
Deep Creek etc. Co., Conant v.	119

Page

De Frietas, Suisun v. 95, 160, 247
De Lappe, Central Irr. Dist. v. 44
Delaware etc. Canal Co., Bruce v. 242
Delmue, Ronnow v. 247, 360
De Necochea v. Curtis 76, 91, 140, 141, 142, 145, 146, 148, 152, 157, 159, 164, 165, 273
Deniff, Smith v. 37, 53, 85, 89, 98, 110
Despain, Tynon v. 76
Dick v. Bird 153
Dick v. Caldwell 153
Diersen, Gwynn v. 122
Dillon v. Acme Oil Co. 239
Directors v. Abila 45
Ditch Co. v. Leigh 81
Dixon, Gray v. 18
Dixon, Ortman v. 17, 52, 70, 75, 156, 179, 180, 204, 205, 215, 219, 224
Dixon v. Schermeir 181, 192, 193
Dodge v. Marden 275
Doe, Smith v. 17, 18
Dorr v. Hammond 263, 268
Dorris v. Sullivan 87, 180
Dougherty v. Cleary 196, 270, 271
Dougherty v. Haggin 147, 205
Doyle v. San Diego Co. 84
Drake v. Earhart 28, 38, 39, 60
Driscoll, Logan v. 11, 70, 235, 236
Dufour, Southern Pac. Ry. v. 130
Dumon v. Kellogg 290
Dunbar, Fresno Canal etc. Co. v. 179
Dunsmuir v. Port Angeles etc. Co. 195
Dunster, Lord v. 122
Durfee v. Garvey 201

Earhart, Drake v. 28, 38, 39, 60
East Riverside etc. Co., Fudickar v. 183, 195
Eaton, Gould v. 125, 127, 135, 299, 300, 302
Eaton, Hoge v. 117, 118, 119
Eddy v. Simpson 6, 83, 154, 161, 270
Edes, Wood v. 290
Edgar v. Stevenson 70, 79, 93, 105, 224, 291
Edwards v. Allouez Co. 244
Edwards, North Fork etc. Co. v. 192, 199

Page

Eldorado Water Co., Osgood v. 25, 52, 97, 121
Eliot v. Whitmore 210
Elkhorn M. Co., Black v. 184, 265
Elk River etc. Co., People v. 238
Ely v. Ferguson 113, 130
Emerson, Walker v. 103, 241, 281
Englehardt, Mesnager v. 192
Ennor v. Raine 249
Enright, City of Santa Cruz v. 98, 107, 286
Enterprise etc. Co., California etc. Co. v. 302
Enterprise etc. Co., Miller v. 116
Escondido H. S. Dist. v. Escondido Sem. 45
Escondido Irr. Dist., Merchants' Bk. v. 44, 45, 356
Escondido Sem., Escondido H. S. Dist. v. 45
Esmond v. Chew 70, 236
Estrada, San Luis etc. Co. v. 13, 205, 206, 217, 248
Etiwanda etc. Co., Wood v. 53, 98, 160, 263
Eureka etc. Co., Weaver v. 121, 146, 155, 166
Evans, Creighton v. 241, 281
Evans, McGillivary v. 92, 247
Evans, Reclamation Dist. v. 122
Everett v. Hydraulic Co. 202
Ewing, Mott v. 241, 281

Fairplay etc. Co. v. Weston 196
Falk, Quirk v. 181
Fallbrook Irr. Dist. v. Bradley 45, 46, 286
Fall River etc. Co., Sherman v. 239
Farmers' etc. Co., Bunkers etc. Co. v. 129
Farm Inv. Co. v. Carpenter 62, 64, 252, 256
Farmers' etc. Co. v. White 26, 54, 206, 257
Farmers' Independent Ditch Co. v. Agricultural Ditch Co. 257
Farmers' Irr. Dist. v. Frank 30, 86, 206, 275
Farmers' etc. Irr. Co. v. Gothenburg Irr. Co. 219
Faulkner v. Rondoni 76, 79, 224, 278, 291
Feck, Swamp Dist. v. 122

Page
Feige, Fisher v. 155, 228, 301
Feliz v. Los Angeles 4
Felt, Standford v. 79, 122, 241, 281, 296, 297, 301
Ferguson, Ely v. 113, 130
Ferran v. Board of Supervisors 122
Ferrea v. Knipe 33, 34, 190
Ferrea, Matthews v. 140, 278, 282
Fifield v. Spring Valley etc. Works 280, 304
Fifield, Spring Valley etc. Works v. 250
Fine, Hayes v. 88, 180
Fisher v. Feige 155, 228, 301
Fitzell v. Leaky 181
Fitzgerald v. Urton 17, 18
Fletcher, Phoenix Water Co. v. 12, 70, 220, 223, 224, 234, 235
Fletcher v. Rylands 202
Flickinger v. Shaw 183
Flood, Allen v. 228
Fond, Hobart v. 19, 25
Foreman v. Boyle 247
Fogarty v. Fogarty 281
Fort Lyon Co. v. Chew 180
Fowler Canal Co., Heilbron v. 116, 240, 241, 242, 281
Fox, Barrows v. 70, 79, 190, 191, 199, 201, 205, 206, 224, 291, 333
Fraler v. Sears etc. Co. 201
Frank, Farmers' Irr. Dist. v. 30, 86, 206, 275
Frederick v. Dickey 282
Freed, Thorp v. 29, 154
Fremont, McCarty v. 249
Fresno Canal Co. v. Dunbar 179
Fresno Canal Co. v. Park 179
Fresno Canal Co. v. Rowell 179
Fresno Irr. Co., Balfour v. 179
Frey, Lowden v. 219, 246
Frey, Utt v. 143, 160, 263, 268
Frietas, Correa v. 103, 155, 196, 271
Frink, Sieber v. 263, 268, 269
Frost, Glaze v. 210
Fudickar v. Irrigation Dist. 88, 183, 195
Fuller v. Azusa etc. Co. 293

Gage, Riverside etc. Co. v. 83, 195, 248, 302
Gale, Davis v. 91, 215, 217, 219, 220, 263, 264, 270, 282
Gallagher, Basey v. 11, 15, 21, 26, 74, 155
Gallagher v. Montecito etc. Co. 219, 278, 303
Garland, Bear Lake etc. Co. v. 22
Garrett, Bolter v. 284
Garrett, Welch v. 268
Garringer, Woolman v. 150, 153, 164
Garvey, Durfee v. 201
Gassert v. Noyes 218, 272
Gaston etc. Min. Co., McCarthy v. 236, 245
Gearhart, Kimball v. 70, 148, 151, 157, 180
Gehring, Montana etc. Co. v. 234
Gell, Arkwright v. 196, 271
Gelwicks v. Todd 181
Gentner, Carson v. 37, 54
Getchell, Nicholson v. 245
Gibbs v. Williams 115
Gibson v. Puchta 232
Gilbert, Baxter v. 37, 78, 79, 121
Gillan v. Hutchison 18, 19
Gilman v. Tilton 290
Glasell v. Verdugo 299
Glaze v. Frost 210
Gleason v. Hill 180, 204
Glendora Water Co., Cullen v. 45
Glide, Barnes v. 126
Glide v. Superior Court 123
Goldman, Reclamation Dist. v. 122
Gold Run etc. Co., People v. 236, 238
Goodrich, Swift v. 88, 192
Goon v. Proctor 263
Gothenburg Irr. Co., Farmers' etc. Irr. Co. v. 219
Gould, Barker v. 125, 127
Gould v. Boston Dock Co. 290
Gould v. Eaton 125, 127, 135, 299, 300, 302
Gould v. Maricopa etc. Co. 86, 94
Gould, Santa Barbara v. 95, 129, 267, 295
Gould v. Stafford 79, 293, 296, 297, 299, 302
Grant, Alston v. 239
Gray v. Dixon 18
Green v. Carotta 195, 196
Greencastle v. Hazelett 239
Greenlaw, National Bank v. 123
Green, Smith v. 248, 278
Green v. Swift 116

Page
Greer v. Heiser 217
Gregg, Parker v. 202, 224
Gregory v. Harris 235, 236
Gregory v. Nelson 192, 193, 200, 201, 243
Gresier, Kleinschmidt v. 210, 263
Griseza v. Terwilliger 87, 143, 180, 184, 185, 187, 189
Gunn, People v. 122
Guiraud, Thomas v. 190
Guiterres v. Albuquerque etc. Co. 22, 26, 95, 240
Gutierrez, Albuquerque etc. Co. v. 38
Gutierrez v. Wege 298, 299
Gwynn v. Diersen 122
Gwynn, Swamp Land Dist. v. 122

Hagar v. Board of Supervisors 44, 122
Hagar, People v. 122
Hagar, Reclamation Dist. v. 122
Haggin, Dougherty v. 147, 205
Haggin, Lux v. 4, 12, 13, 15, 25, 26, 29, 33, 34, 36, 37, 51, 52, 54, 62, 67, 78, 79, 80, 89, 98, 103, 107, 113, 120, 122, 124, 135, 196, 242, 271, 284, 286, 289, 291, 292, 293, 294, 296, 297, 301, 304, 305, 320, 359
Haggin, Swamp Land Dist. v. 122
Haines, Vansickle v. 34, 38, 57, 76, 282, 292, 359
Hale v. McLea 124, 294
Hall v. Blaekman 210, 211, 284
Hall, Lobdell v. 92, 154, 179, 267
Hall, Reclamation Dist. v. 123
Hammond, Dorr v. 263, 268
Hammond v. Rose 38
Hancock, Alta Land Co. v. 37, 78, 278, 279, 280, 296, 297, 299 303
Hancock, Natoma Water Co. v. 18, 70, 75, 89, 98, 154, 193, 224, 333
Handy Ditch Co., Louden Canal Co. v. 257
Hanson v. McCue 124, 130, 135, 196, 228, 271, 281
Hapgood, McLean v. 87, 193
Hardin v. Jardon 65
Hardwick, Hillman v. 208
Hargrave v. Cook 37, 78, 196, 215, 217, 219, 271, 303
Harkness, Bradley v. 92

Page
Harris, Gregory v. 235, 236
Harris v. Harrison 291, 297, 298
Harter, Williams v. 76, 181, 182, 194
Hartzall v. Sill 290
Hatch, Shoemaker v. 76
Hathaway, Crawford v. 13, 35, 37, 42, 348
Hausch, Wilcox v. 92, 264
Hawkins, Smith v. 52, 71, 89, 93, 140, 162, 190, 193, 205, 211, 224, 263, 268, 273, 274, 275, 276, 277, 278, 282, 283
Hayes v. Buzzard 86
Hayes v. Fine 88, 180
Hayes, Silver Creek Co. v. 79, 248, 300
Hazelett, Greencastle v. 239
Healey v. Woodruff 93, 96, 98, 100, 105, 106
Heath v. Williams 290
Hecker, Mitchell v. 122
Heckman v. Swett 122
Heilbron v. Land Co. 165, 297, 301
Heilbron v. Fowler Canal Co. 116, 240, 241, 242, 281
Heilbron, Last Chance Co. v. 103, 240, 278, 282, 302
Hensley v. Reclamation Dist. 123
Hensley, Weinrich v. 123
Herring v. Modesto Irr. Dist. 45
Hesier, Gree v. 217
Hesperia etc. Co. v. Rogers 279, 282
Hewitt v. Story 30, 46, 276
Heynemann v. Blake 94, 195
Hickey v. Miller 119
Hicks v. Bell 8
Hicks v. Compton 242
Higgins v. Barker 70, 215, 224
Highland Ditch Co., Miller v. 236, 247
Higuerra, Charnock v. 190, 217, 246, 300
Hill, Chauvet v. 283, 296, 300
Hill, Conradt v. 181, 282
Hill, Gleason v. 180, 204
Hill v. King 12, 220
Hillman v. Hardwick 208
Hillman v. Newington 223, 247
Hill, Mason v. 12, 289
Hill v. Newman 83, 87, 88, 91
Hill v. Smith 12, 219, 220, 223, 234, 235
Hilton, Van Bibber v. 37, 78, 93, 249

Page

Himes v. Johnson 76
Hindman v. Rizor 187, 211
Hobart v. Wicks 76, 215
Hobbs v. Amador etc. Co. 236
Hoffman v. Stone 84, 160, 264
Hoffman v. Tuolumne etc. Co. 202
Hoge v. Eaton 117, 118, 119
Hosmer, Reynolds v. 181, 194, 204
Hostetter, Barnum v. 247
Hotchkiss, Parker v. 290
Houston, People v. 122
Howard v. Perrin 124
Howcroft v. Union etc. Co. 129
Howell v. Big Horn Basin etc. Co. 202
Howell v. Johnson 52, 54, 118, 119
Hoye v. Sweetman 244
Hoyt, Norris v. 92
Hoyt, Parks v. 83, 195, 198, 245, 248
Huber, Levee Dist. v. 122
Huber v. Merkel 324
Hudson, McGhee etc. Co. v. 37
Hudson, McClintock v. 125, 126, 127, 130, 226, 233, 295
Hughson v. Crane 45
Hulbert, People v. 122
Hungarian etc. Co. v. Moses 181
Hurd v. Boise City etc. Co. 181
Hurd, Spargur v. 281
Huston v. Leach 130
Hutchison, Gillan v. 18, 19
Hutson v. Woodbridge Dist. 122
Hydraulic Co., Everett v. 202

Illinois etc. Dist., Missouri v. 119
Illius, Brown v. 239
Imperial etc. Co., Robison v. 143
Independent Ditch Co., Leigh v. 33
Integral etc. Co. v. Altoona etc. Co. 192, 268, 276
Irish, Ramelli v. 76, 217, 219
Irrigation Dist., Fudickar v. 88
Irvine, Bathgate v. 37, 78, 79, 106, 280, 292, 299, 300, 302, 303
Irwin v. Phillips 7, 11, 12, 18, 33, 70, 76, 79, 155
Irwin v. Strait 165
Ish, Offield v. 110
Ivie, Monroe v. 153, 206

Jacob v. Day 76, 192, 193, 199, 238
Jacob v. Lorenz 120, 180, 183, 194, 216, 219
Jacobs, Lorenz v. 92, 247, 286
Jagui v. Johnson 200
Jatunn v. Smith 140, 282
Jefferds, People v. 45
Jennings, Proctor v. 72
Jennison v. Kirk 11, 15, 21, 201
Jerrett v. Mahan 93
Johncox, Benton v. 37, 62
Johnson, Himes v. 76
Johnson, Howell v. 52, 54, 118, 119
Johnson, Jagui v. 200
Johnson v. Little etc. Co. 86, 181
Johnson, Platt v. 290
Johnson, Sayre v. 92, 208
Johnson, Stowell v. 59
Johnson v. Superior Court 245
Jones v. Adams 57, 76, 298
Joseph v. Ager 192, 199
Jardon, Hardin v. 65
Judson v. Malloy 268, 276
Junkans v. Bergin 70, 217, 224

Kaler v. Campbell 93
Kansas v. Colorado 21, 119, 129, 241
Katz v. Walkinshaw 121, 124, 131, 132, 133, 135, 152, 225, 226, 227, 228, 229, 231, 233, 246, 248, 271, 291, 294, 295, 299, 302
'Kate Hayes etc. Co., County of Yuba v. 236
Kaweah Co., Creighton v. 196
Keane v. Cannovan 276
Kehl, Ball v. 103, 195, 197, 224, 271, 280
Kelly v. Natoma etc. Co. 34, 140, 156, 160, 224
Kellog, Dumont v. 290
Kennedy, Bliss v. 290
Kennedy, Reclamation Dist. v. 122
Kern Island etc. Co., Stein Canal Co. v. 224
Kidd v. Laird 52, 70, 83, 195, 217
Kidd, Nevada etc. Co. v. 73, 83, 87, 145, 148, 149, 151, 157, 159, 163, 164, 165, 166, 193, 194, 195, 219, 224, 247, 266, 268
Kidd, St. John v. 268, 276
Kidder, Cowles v. 290
Kier, Richardson v. 198, 201, 202

Page
Kilham, Parke v. 146, 162, 196, 245, 271, 284
Kimbal v. Gearhardt 70, 148, 151, 157, 180
Kimball v. Reclamation Dist. 122
Kingdom, Bliss v. 193
King, Hill v. 12, 220
King, South Tule etc. Co. v. 88, 185
Kings etc. Co., Lower etc. Co. v. 181, 183, 191, 194, 240
Kinman, Pope v. 80
Kinnaird v. Standard Oil Co. 239
Kinsell, Matthews v. 202
Kirk v. Bartholomew 208
Kirk, Jennison v. 11, 15, 21, 201
Kirk, Titcomb v. 5, 146, 193
Kitts, Cross v. 124, 135, 229
Kleinschmidt v. Gresier 210, 263
Knipe, Ferrea v. 33, 34, 190
Kreyenhagen, Wells v. 157

La Canada Water Co., Cohen v. 113, 130, 226, 233, 295
Laird, Kidd v. 52, 70, 195, 217
Laird, Laird v. 83
Lakeside Ditch Co. v. Crane 196, 246, 271
Lake v. Tolles 81
Lamar etc. Co. v. Annuity etc. Co. 54
Lamar Canal Co., Mohl v. 54
Lamb v. Reclamation Dist. 122
Land etc. Co., Heilbron v. 165, 301
Lannon, McDonald v. 187
La Rue, People v. 122
Last Chance Co. v. Bunker Hill Co. 198, 218, 272
Last Chance etc. Co. v. Heilbron 103, 240, 278, 282, 297, 302
Lawrence, Clark v. 239
Leach, Huston v. 130
Leahy, Fitzell v. 181
Learned v. Tangeman 297
Lee, Thompson v. 70, 152
Le Franc, Coleman v. 190
Left Hand Ditch Co., Coffin v. 38, 57
Left Hand Ditch Co., Oppenlander v. 265, 335
Leggat v. Carroll 143, 144
Leigh v. Independent Ditch Co. 33
Levaroni v. Miller 17, 236
Levee Dist. v. Huber 122
Levee Dist., People v. 123
Lillingston, Walker v. 191, 294
Lindsay etc. Co. v. Mehrtens 45, 286
Linda Vista Irr. Dist., People v. 45
Linhart, Arnett v. 181
Little etc. Co., Johnston v. 86, 181
Livingston, Walker v. 191, 294
Lobdell v. Hall 92, 154, 169, 267
Lobdell v. Simpson 70, 71, 249, 291, 302
Logan v. Driscoll 11, 70, 235, 236
Logan, Smith v. 182
Lone Tree etc. Co. v. Cyclone etc. Co. 37, 80
Longley, Boynton v. 120
Lord v. Dunster 122
Lorenz v. Jacobs 92, 247, 286
Lorenz, Jacob v. 180, 183, 194, 216, 219, 247
Lorenz v. Waldron 201, 241, 242
Los Angeles v. Baldwin 83
Los Angeles, Feliz v. 4
Los Angeles etc. Assn. v. Los Angeles 115, 120
Los Angeles v. Pomeroy 4, 80, 124, 125, 127, 129, 132, 134, 192, 193, 199, 226, 278, 286
Los Angeles, Vernon Irr. Co. v. 4, 80, 105, 293, 302
Louden etc. Canal Co. v. Handy Ditch Co. 257
Love, Abel v. 92
Lowden v. Frey 219, 246
Lower Kings River etc. Co. v. Kings etc. Co. 181, 191, 194, 240
Lower Kings River Reclamation Dist. v. McCullah 123
Lowery, Weimer v. 18, 193
Lowney, Wood v. 187
Low v. Rizor 211
Low v. Schaffer 94, 185
Luterman, Trambly v. 38
Lux v. Haggin 4, 12, 13, 15, 25, 26, 29, 33, 34, 36, 37, 51, 52, 54, 62, 67, 78, 79, 80, 89, 98, 103, 107, 113, 120, 122, 124, 135, 196, 242, 271, 284, 286, 289, 291, 292, 293, 294, 296, 297, 301, 304, 320, 359
Lyles v. Perrin 88, 180
Lytle Creek etc. Co. v. Perdew 92

Page
McLean v. Hapgood 87
Madera Irr. Dist., In re 44
Maeris v. Bicknell 70, 91, 151, 154, 161, 216, 218
Mahan, Jerrett v. 93
Maier, Tuolumne etc. Co. v. 76
Malloy, Judson v. 268, 276
Mantes, Wells v. 140, 141, 143, 145, 146, 148, 151, 152, 159, 164, 165, 266, 273
Marble Creek etc. Co., Becker v. 204, 212
Marden, Dodge v. 275
Maricopa etc. Co., Gould v. 86, 94
Marra v. San Jacinto Irr. Dist. 46
Marshall v. Taylor 122
Mason v. Hill 12, 289
Mastin, Talcott v. 88
Matthews v. Ferrea 140, 278, 282
Matthews v. Kinsell 202
Mayberry v. Alhambra etc. Co. 87, 192, 193, 265
May, Tulare County v. 123
McBride, Whittaker v. 65
McCall v. Porter 160
McCarty v. Fremont 249
McCarthy v. Gaston Min. Co. 236, 245
McCauley, Cruse v. 52, 62, 80
McClintock v. Hudson 125, 126, 127, 130, 226, 233, 295
McCord v. Slavin 123
McCoy, Natoma etc. Co. v. 224, 235
McCrary v. Baudry 285
McCue, Nanson v. 124, 130, 135, 196, 228, 271, 281
McCue, Wilkins v. 113, 140, 282
McCullah, Lower Kings Reclamation Dist. v. 123
McDaniel v. Cummings 120
McDonald v. Askew 83, 180
McDonald v. Bear River Co. 70, 204, 215, 219, 224, 248
McDonald v. Lanne 187
McGhee etc. Co., Hudson v. 37
McGillivary v. Evans 92, 247
McGuire v. Brown 37, 76, 78, 80, 83, 103, 106, 160, 188, 195, 217, 263
McIntosh, Nicols v. 194
McKeany v. Black 83
McKinney, Partridge v. 88, 180, 269
McKinney v. Smith 70, 204, 205, 219, 224, 270
McLea, Hale v. 124, 294
McLean v. Hapgood 193
McNulty, Richardson v. 268
McShane v. Carter 181, 182
Mechanics' Foundry v. Ryall 249
Mehrtens, Lindsay etc. Co. v. 45, 286
Meiners, Rice v. 37, 78
Meiners, Ventura etc. Co. v. 299
Meng v. Coffey 30
Merced Min. Co., Boggs v. 17, 196
Merchants' Bank v. Escondido Irr. Dist. 44, 45, 326
Mercy, Barneich v. 190, 271
Merkel, Huber v. 324
Merrill v. Southside etc. Co. 286
Mesmer, Rose v. 180, 246, 280, 293, 295
Mesnager v. Englehardt 192
Metropolitan etc. Co. v. Topeka etc. Co. 204
Meyer, Bachman v. 122
Meyer, Steinberg v. 246
Miller v. Enterprise etc. Co. 116
Miller v. Highland Ditch Co. 236, 247
Miller, Levaroni v. 17, 236
Miller v. Perris Irr. Dist. 45
Miller etc. v. Rickey 119, 190, 248
Miller v. Thompson 247
Miles v. Butte etc. Co. 86, 166
Mills, Patterson v. 70, 202, 203, 242, 248
Miners' Ditch Co., Tenney v.
Mirfield, Turner v. 239
Missouri v. Illinois etc. Dist. 119
Missouri v. Nebraska 304
Mitchell v. Amador Canal etc. Co. 89, 141, 157, 181
Mitchell v. Hecker 122
Modesto, Adams v. 123
Modesto Irr. Dist., Herring v. 45
Modesto Irr. Dist., Tregea v. 46
Modoc etc. Co. v. Booth 37, 78, 79, 242, 291, 302
Mohl v. Lamar Canal Co. 54
Montana etc. Co. v. Gehring 234
Montecito etc. Co., Gallagher v. 219, 278, 303

Page

Montecito etc. Co. v. Santa Barbara 94, 116, 125, 127, 131, 132, 226, 242, 278, 281, 282, 283, 295
Montgomery, Crescent Canal Co. v. 94, 95, 216
Moon v. Rollins 268, 276
Mooney, Unger v. 283
Moore v. Clear Lake etc. Co. 241, 281
Monroe v. Ivie 153, 206
Morgan, Butte etc. Co. v. 249
Morgan, Shenandoah etc. Co. v. 80, 219, 248
Morris v. Bean 118
Moses, Hungarian etc. Co. v. 181
Moss v. Ross 211
Mott v. Ewing 241, 281
Moyer v. Preston 38, 56
Mt. Carmel Fruit Co. v. Webster 89, 179, 192
Mullin, Brown v. 197, 224
Munroe v. Ivie 153, 206
Murray v. Tingley 142, 148, 152
Muscupiabe etc. Co., Wiggins v. 85, 296, 298

National Bank v. Greenlaw 123
Natoma Water Co., Broder v. 21, 25, 76, 97
Natoma etc. Water Co. v. Hancock 18, 70, 75, 89, 98, 154, 224, 333
Natoma etc. Co., Kelly v. 34, 140, 156, 160, 224
Natoma etc. Co. v. McCoy 224, 235
Nebraska, Missouri v. 304
Nelson, Gregory v. 192, 200, 201, 243
Nephi Irr. Co. v. Vickers 191
Nevada etc. Co. v. Bennett 86, 181, 210
Nevada etc. Co. v. Kidd 73, 83, 87, 145, 148, 149, 151, 157, 159, 163, 164, 165, 166, 193, 194, 195, 219, 224, 247, 266, 268
Nevada etc. Co. v. Powell 70, 85, 215
Newington, Hillman v. 224, 247
Newman, Hill v. 83, 87, 88, 91
Newman v. Superior Court 122
New Mercer etc. Co. v. Armstrong 210, 211, 263

Page

New York etc. Co., Bear River etc. Co. v. 7, 220, 234, 236, 305
Nicols v. McIntosh 194
Nicolson v. Getchell 245
Noble, Quinlan v 192
Norman v. Corbley 280
Norris v. Hoyt 92
North American Exploration Co. v. Adams 181, 268
North Bloomfield Co., United States v. 236
North Bloomfield Co., Woodruff v. 236, 238, 244
Northern Springs Min. Co., Sullivan v. 225
North etc. Co. v. Orient etc. Co. 94
North Fork etc. Co. v. Edwards 192, 199
Noyes, Gassert v. 218, 272

Offield v. Ish 110
Ogburn v. Connors 120
O'Hara, Smith v. 72, 87, 180, 184, 185, 224
O'Keiffe v. Cunningham 239
Oliver v. Agasse 192, 199
O'Neto v. Restano 87, 180, 280, 282
Ophir etc. Co. v. Carpenter 157, 158, 205
Oppenlander v. Left Hand Ditch Co. 265, 335
Oregon etc. Co., Weiss v. 244
Orient etc. Co., North etc. Co. v. 94
Ortman v. Dixon 17, 52, 70, 75, 136, 156, 179, 180, 204, 205, 215, 219, 224
Osgood v. Eldorado etc. Co. 25, 52, 80, 97, 121, 149
Oviatt v. Big Four etc. Co. 157
Owens, Tregea v. 45

Pacific etc. Club v. Sausalito etc. Co. 87
Pacific etc. Co., Conkling v. 80, 241, 281
Packer v. Bird 116
Page v. Rocky Ford etc. Co. 85, 265, 280, 304
Painter v. Pasadena etc. Co. 293
Palmdale Irr. Dist. v. Rathbe 44

Page

Parke v. Kilham 142, 162, 196, 245, 271, 284
Parker v. Gregg 202, 224
Parker v. Hotchkiss 290
Park, Fresno Canal etc. Co. v. 179
Parks etc. Co. v. Hoyt 83, 195, 198, 245, 248
Parsons, Snow v. 290
Partridge v. McKinney 88, 180, 269
Parvin, People v. 122
Parvin, Reclamation Dist. v. 122
Pasadena etc. Co., Painter v. 293
Passavant, Arnold v. 210, 212
Patterson v. Mills 248
Payne v. Cummings 181, 182
Pebdola v. Ramm 181
Pennsylvania Coal Co. v. Sanderson 235
People v. Ahern 122
People v. Borda 250
People v. Brown Valley Irr. Dist. 45
People's Ditch Co., Brown v. 200
People's Ditch Co., Burris v. 192, 199
People v. City of Oakland 123
People v. Coghill 122
People v. Elk River etc. Co. 238
People v. Gold Run etc. Co. 236, 238
People v. Gunn 122
People v. Hagar 122
People v. Haggin 122
People v. Houston 122
People v. Hulbert 122
People v. Jeffereds 45
People v. La Rue 122
People v. Levee Dist. 123
People v. Linda Vista Irr. Dist. 45
People v. Perris Irr. Dist. 45
People v. Reclamation Dist. 122, 123
People v. Selma Irr. Dist. 45
People v. Truckee Lumber Co. 250, 293
People v. Turnbull 45
Peralta, Santa Paula etc. Co. v. 70, 73, 88, 92, 122, 205, 215, 217, 224, 246
Perdew, Lytle Creek etc. Co. v. 92

Page

Peregoy v. Selick 73, 246
Perrin, Howard v. 124
Perrin, Lyles v. 88, 180
Perry Irr. Dist., Miller v. 45
Perris Irr. Dist., People v. 45
Perris Irr. Dist., Thompson v. 45
Paterson, Atchison v. 11, 15, 21, 220, 223, 234, 245
Peterson v. Santa Rosa 301
Phillips, Lower Kings Reclamation Dist. v. 123
Phoenix etc. Co. v. Fletcher 12, 70, 220, 223, 224, 234, 235
Pico v. Colimas 201
Pitt, Rodgers v. 46, 210, 211, 213, 240, 246
Platte etc. Co. v. Buckers etc. Co. 127
Platte etc. Co. v. Central etc. Co. 269
Platt v. Johnson 290
Pock, Sanguinetti v. 113, 120
Pomeroy, Los Angeles v. 4, 80, 124, 125, 127, 129, 132, 134, 192, 193, 199, 226, 278, 286
Pond, Abbott v. 189
Pond M. Co., Real Del Monte M. Co. v. 242
Pope v. Kinman 80
Port Angeles etc. Co., Dunsmuir v. 195
Porter, McCall v. 160
Poschane etc. Co. v. Standart 205
Poso Irr. Dist., Crall v. 44
Powell, Nevada etc. Co. v. 70, 85, 215
Preston, Moyer v. 38, 56
Proctor, Goone v. 263
Proctor v. Jennings 72
Promontory etc. Co. v. Argile 277
Puchta, Gibson v. 232
Pugh v. Wheeler 290

Quinlan v. Noble 192
Quirk v. Falk 181

Racouillat v. Sansevain 92
Raine, Ennor v. 249
Ralston v. Board of Supervisors 122
Ramelli v. Irish 76, 217, 219
Ramm, Pendola v. 181

Page

Rathbe, Palmdale Irr. Dist. v. 44
Razzo v. Varni 113
Real Del Monte M. Co. v. Pond M. Co. 242
Reclamation Dist. v. Burger 123
Reclamation Dist. No. 125 v. Coghill 122
Reclamation Dist. v. Evans 122
Reclamation Dist. v. Goldman 122
Reclamation Dist. v. Grant 122
Reclamation Dist. v. Hagar 122, 123
Reclamation Dist., Hensley v. 123
Reclamation Dist. v. Kenedy 122
Reclamation Dist., Lamb v. 122
Reclamation Dist. v. Parvin 122
Reclamation Dist., People v. 122, 123
Reclamation Dist. v. Runyon 123
Reclamation Dist., San Francisco Savings Union v. 123
Reclamation Dist. v. Turner 122
Reclamation Dist. v. Van Loben Sels 123
Reclamation Dist. v. West 123
Reed v. Spicer 192
Reinbach, Wahle v. 239
Reno etc. Co. v. Stevenson 29, 38, 57, 359
Restano, Oneto v. 87, 180, 280, 282
Reynolds v. Hosmer 181, 194, 204
Rialto Irr. Dist. v. Brandon 45
Rialto Irr. Dist., Sechrist v. 45
Rice v. Meiners 37, 78
Richards, Chasemore v. 225, 228, 290
Richards Irr. Co., Cole v. 38, 121
Richardson, Alhambra Water Co. v. 278, 281
Richardson v. Kier 198, 201, 202
Richardson v. McNulty 268
Richland Township, Upjohn v. 239
Rickey, Miller etc. Co. v. 190, 248
Rincon etc. Co. v. Anaheim etc. Co. 150, 248
Rio Grande etc. Co., Telluride etc. Co. v. 22, 241
Rio Grande etc. Co., United States v. 21, 65, 67, 68, 116

Page

Riverside etc. Co. v. Gage 83, 195, 248, 302
Riverside etc. Co., Rogers v. 194, 203
Riverside etc. Co. v. Sargent 161, 190, 205
Riverside etc. Co., Stockman v. 196, 271
Rizor, Hindman v. 187, 211
Rizor, Low v. 211
Robinson v. Imperial etc. Co. 143
Rocky etc. Co., Paige v. 85, 265, 280, 304
Roeder v. Stein 181, 206
Rogers, Hesperia etc. Co. v. 279, 282
Rodgers v. Pitt 46, 210, 211, 213, 240, 246
Rogers v. Riverside etc. Co. 194, 203
Rogers v. Scoggs 17
Rollins, Moons v. 268, 276
Rondini, Faulkner v. 76, 79, 224, 278
Ronnow v. Delmue 247, 360
Rosa, So. Yuba Water Co. v. 76
Rose, Hammond v. 38
Rose v. Mesmer 180, 246, 280, 293, 295
Ross, Moss v. 211
Round Valley etc. Co., Standart etc. Co. v. 181
Rowell, Fresno Canal etc. Co. v. 179
Runyon, Reclamation Dist. 551 v. 123
Rupley v. Welch, 18, 19, 154
Ryall, Mechanics' Foundry v. 249
Rylands, Fletcher v. 202

Sabron, Barnes v. 73, 76, 113, 205, 210, 241
Sacramento, Cardwell v. 116
Sacramento Electric Co., Clare v. 123
Saldunbehere, Watterson v. 105, 141, 247
Salina etc. Co. v. Salina etc. Co. 185
Salt Lake City v. Salt Lake etc. Co. 12, 28, 149
Salt River Co., Slosser v. 86
San Diego Co., Doyle v. 84
San Dimos etc. Co. v. San Jose etc. Co. 99

Page
Sanderson v. Pennsylvania Coal Co. 235
Sander v. Wilson 37
San Francisco Sav. Union v. Reclamation Dist. 123
Sanguinetti v. Pock 113, 120
San Jacinto Irr. Dist., Marra v. 46
San Jose etc. Co., Allen v. 192, 199
San Jose etc. Co., San Dimos etc. Co. v. 99
San Jose Land Co. v. San Jose Ranch Co. 106
San Jose W. Co. v. San Jose Land Co. 99
San Luis etc. Co. v. Estrada 13, 205, 206, 217, 248
San Luis etc. Co., Zimmler v. 87, 193, 203
San Miguel etc. Co., Suffolk etc. Co. v. 238
Sansevain, Racouillat v. 92
Santa Barbara v. Gould 95, 129, 267, 295
Santa Barbara, Montecito etc. Co. v. 94, 116, 125, 127, 131, 132, 226, 242, 278, 281, 282, 283, 295
Santa Cruz v. Enright 98, 286
Santa Paula etc. Works v. Peralta 70, 73, 85, 88, 92, 205, 215, 217, 224, 246
Santa Rosa, Peterson v. 301
Sargent, Riverside etc. Co. v. 161, 190, 205
Sausalito etc. Co., Pacific etc. Club v. 87
Sayre v. Johnson 92, 208
Schermeier, Dixon v. 181, 192, 193
Schulz v. Sweeney 270
Schultz v. Winter 247
Schwab v. Beam 143, 335
Scoggs, Rogers v. 17
Sears etc. Co., Fraler v. 201
Seehrist v. Rialto Irr. Dist. 45
Selma Irr. Dist., People v. 45
Sellick, Peregoy v. 73, 246
Semi-Tropic Co., Anaheim etc. Co. v. 92, 154, 196, 271, 301
Senior v. Anderson 70, 71, 76, 93, 100, 106, 140, 141, 155, 162, 165, 181, 191, 204, 205, 210, 224, 246, 267, 279
Seymour, Wright v. 116
Page
Sharpe, Beers v. 280
Shaw, Flickinger v. 183
Shenandoah etc. Co. v. Morgan 80, 219, 248
Shepard, Tulare Irr. Dist. v. 45, 46
Sherman v. Fall River etc. Co. 239
Shirley, Barnard v. 239
Shoemaker v. Hatch 76
Sieber v. Frink 263, 268, 269
Sill, Hartzall v. 290
Silver Creek etc. Co. v. Hayes 79, 248, 300
Silver, Swamp Land Dist. v. 122
Silver etc. Co., Valealda v. 276
Simpson, Eddy v. 6, 83, 154, 161, 270
Simpson, Lobdell v. 70, 71, 249, 290, 302
Simpson v. Williams 205
Sims v. Smith 238
Slade v. Sullivan 242
Slavin, McCord v. 123
Slosser v. Salt River Co. 86
Smith, Brown v. 207, 224
Smith, Burdge v. 98
Smith v. Corbitt 181, 182, 215, 217, 296, 298
Smith v. Deniff 37, 53, 89, 98, 103, 111
Smith v. Doe 17, 18
Smith v. Green 248, 278
Smith v. Hawkins 52, 71, 89, 93, 140, 162, 190, 193, 205, 211, 224, 263, 268, 273, 274, 275, 276, 277, 278, 282
Smith, Hill v. 12, 219, 220, 223, 234, 235
Smith, Jatunn v. 140, 282
Smith v. Logan 182
Smith, McKinney v. 70, 204, 205, 215, 219, 224, 270
Smith v. O'Hara 72, 87, 180, 184, 185, 224
Smith, Sims v. 238
Snow v. Parsons 290
Southern Cal. Co., De Barker v. 224
Southern Cal. etc. Co. v. Wilshire 217, 298, 300, 302
Southern Pac. Ry. v. Dufour 130
Southside etc. Co. v. Burson 73, 211, 217
Southside etc. Co., Merrill v. 286
South Tule etc. Co. v. King 88, 185

Page

South Yuba Water Co. v. Rosa 76
Spargur v. Hurd 241, 281
Spicer, Reed v. 192
Spring Creek etc. Co., Tartar v. 17, 18, 75
Spring Valley etc. Works v. Fifield 250, 280, 304
Stafford, Gould v. 79, 293, 296, 297, 299, 302
Standard Oil Co., Kinnaird v. 239
Standart, Posachane etc. v. 205
Standart etc. Co. v. Round Valley etc. Co. 181
Standford v. Felt 79, 122, 241, 281, 296, 297, 301
Steinberg v. Meyer 246
Stein Canal Co. v. Kern Island etc. Co. 224
Stein, Roder v. 191, 206
Stenger v. Thorp 37
Stevenson, Edgar v. 70, 79, 93, 105, 224, 291
Stevenson, Reno etc. Co. v. 29, 38, 57, 359
Stewart, Boise City etc. Co. v. 61, 195
Stimson, Alessandro Irr. Dist. 45
St. John v. Kidd 268, 276
St. Louis etc. Co., Wolf v. 202
Stockman v. Riverside etc. Co. 196, 271
Stone v. Bumpus 155, 189, 196, 224, 236, 271
Stone, Hoffman v. 84, 160, 264
Stoneman, Bean v. 192, 199, 201, 205
Story, Hewitt v. 30, 46, 276
Stowell, Allen v. 245
Stowell v. Johnson 59
Strait v. Brown 124, 130, 226
Strait, Irwin v. 165
Stranahan, Table Mt. M. Co. v. 184
Strickler v. Colorado Springs 217
Strong v. Baldwin 205, 248
Sturr v. Beck 21, 37, 65, 78, 80, 106
St. Vrain etc. Co., Beaver etc. Co. v. 208, 269
Suffolk etc. Co. v. San Miguel etc. Co. 238
Suisun v. De Frietas 95, 160, 247
Sullivan, Dorris v. 87, 180
Sullivan v. Northern Springs Min. Co. 225

Page

Sullivan, Slade v. 242
Superior Court, Johnson v. 245
Superior Court, Glide v. 123
Superior Court, Newman v. 122
Swamp Dist. v. Feck 122
Swamp Dist. v. Glide 123
Swamp Land Dist. v. Gwynn 122
Swamp Land Dist. v. Haggin 122
Swamp Land Dist. v. Silver 122
Swamp Land Dist. v. Wilcox 122
Sweeney, Schultz v. 270
Sweetman, Hoye v. 244
Swett, Heckman v. 122
Swift v. Goodrich 88, 192
Swift, Green v. 116

Table Mt. M. C. v. Stranahan 184
Talbot v. Butte etc. Co. 280
Talcott v. Mastin 88
Tangeman, Learned v. 297
Tartar v. Spring etc. Co. 17, 18, 75
Taylor v. Abbott 76, 103, 106, 151
Taylor, Marshall v. 122
Taylor, Union etc. Co. v. 184
Telluride etc. Co. v. Rio Grande etc. Co. 22, 241
Tenney v. Miners' etc. Co. 70, 202, 203, 242
Terwilliger, Griseza v. 143, 180, 184, 185, 187, 189
Thorp, Stenger v. 37
Thomas v. Guiraud 190
Thompson, Board of Supervisors v. 46
Thompson, Boskowitz v. 45
Thompson v. Lee 70, 152
Thompson, Miller v. 247
Thompson, Perris Irr. Dist. v. 45
Thorp v. Freed 29, 154
Tieleke, Barkley v. 53, 184, 188
Tilton, Gilman v. 290
Tingley, Murray v. 142, 148, 152
Titcomb v. Kirk 5, 146, 193
Todd v. Cochell 202
Todd, Gelwicks v. 181
Todd's Valley etc. Co., White v. 156, 204, 205
Tolles, Lake v. 81
Tomlinson, Ballard v. 239
Topeka etc. Co., Metropolitan etc. Co. v. 204
Trombley v. Lutaman 38
Tregea, Board of Directors v. 44

Page

Tregea v. Modesto Irr. Dist. 46
Tregea v. Owens 45
Truckee Lumber Co., People v. 250, 293
Tulare Irr. Dist. v. Shepard 45, 46
Tulare County v. May 123
Tuolumne etc. Co. v. Chapman 242, 245
Tuolumne etc. Co., Hoffman v. 202
Tuolumne etc. Co. v. Maier 76
Tuolumne etc. Co., Turner v. 202, 278
Turlock Irr. Dist. v. Williams 44
Turnbull, People v. 45
Turner v. Mirfield 239
Turner, Reclamation Dist. v. 122
Turner v. Tuolumne etc. Co. 202, 278
Tyler, Cave v. 93, 96, 97, 98, 100, 107, 109, 110, 280, 303
Tyler v. Wilkinson 290
Tynon v. Despain 76

Underwood, Burdge v. 18
Unger v. Mooney 283
Union etc. Co. v. Dangberg 46, 70, 74, 80, 166, 185, 204, 205, 210, 211, 246, 280
Union etc. Co., Howcroft v. 129
Union etc. Co. v. Taylor 184
United States v. North Bloomfield Co. 236
United States v. Rio Grande etc. Co. 21, 65, 67, 68, 116
Upjohn v. Richland Township 239
Urton, Fitzgerald v. 17, 18
Utah etc. Co., Whitmore v. 127, 128, 129
Utt v. Frey 143, 160, 263, 268

Valcalda v. Silver etc. Co. 276
Van Bibber v. Hilton 37, 78, 93, 249
Van Loben Sels, Reclamation Dist. v. 123
Vansickle v. Haines 34, 38, 57, 76, 282, 292, 359
Varni, Razzo v. 113
Vaughn, Butte Canal etc. Co. v. 220, 234, 264, 265, 272
Ventura etc. Co. v. Meiners 299
Verdugo, Glasell v. 299

Page

Vernon Irr. Co. v. Los Angeles 4, 80, 105, 293, 302
Vestal v. Young 199, 241
Vickers, Nephi Irr. Co. v. 191
Vineland etc. v. Azusa etc. 125, 126, 127, 128, 129, 135, 152, 217, 226, 413
Vineland Irr. Dist., Baxter v. 45
Vivian, Mud Creek etc. Co. v. 37

Wabash etc. Co., Cooper etc. Co. v. 230
Wahle v. Reinbach 239
Walderon, Ware v. 201
Waldron, Lorenz v. 201, 241, 242
Walkinshaw, Katz v. 121, 124, 131, 132, 133, 135, 152, 225, 226, 227, 228, 229, 231, 233, 246, 248, 271, 291, 294, 295, 299, 302
Walker v. Emerson 103, 241, 281
Walker v. Lillingston 191, 294
Walker, Ware v. 201, 217
Wallace, Walsh v. 143, 154, 360
Ware v. Walker 201, 217
Waring v. Crow 275, 276
Watterson v. Saldunbehere 105, 141, 247
Watkins etc. Co. v. Clements 37
Weaver, Conger v. 13, 34, 52, 70, 74, 75, 89, 139, 145, 149, 151, 162
Weaver v. Eureka etc. Co. 121, 146, 155, 166
Webster, Mt. Carmel Fruit Co. v. 89, 179, 192
Wege, Gutierrez v. 298, 299
Weill v. Baldwin 203
Weinrich v. Hensley 123
Weiss v. Oregon etc. Co. 244
Welch v. Garrett 53, 268
Welch, Rupley v. 18, 19, 154
Wells v. Mantes 140, 141, 143, 145, 146, 148, 151, 152, 158, 159, 164, 266, 273
Wells v. Kreyenhagen 157
West, Campbell v. 192
West Los Angeles, Yarwood v. 125, 294
Weston, Fairplay etc. Co. v. 196
West, Reclamation Dist. v. 123
West Walker River Ditch Co., Burbank v. 202
Whaley, Blankenshop v. 183
Wheatley v. Baugh 232
Wheeler, Bree v. 282
Wheeler, Pugh v. 290

	Page
White, Crippen v.	335
White, Farmers' etc. Co. v.	26, 54, 207, 257
White v. Todd's etc. Co.,	156, 204, 205
Whitesides, Burnett v.	264
Whitemore, Eliot v.	210
Whitmore v. Utah etc. Co.	127, 128, 129
Whitson, California Pastoral Co. v.	123
Whittaker v. McBride	65
Wholley v. Caldwell	85, 304
Wicks, Hobart v.	76, 215
Wiggins v. Muscupiabe etc. Co.	85, 296, 298, 299
Wilcox v. Hausch	92, 264
Wilkins v. McCue	113, 122, 140, 282
Wilkinson, Tyler v.	290
Willett, Clark v.	191, 241, 242
Willey v. Decker	29, 32, 37, 38, 55, 60, 78, 86, 118, 119, 194, 240
Williams v. Board of Supervisors	122
Williams, Gibbs v.	115
Williams v. Harter	76, 181, 182, 194
Williams, Heath v.	290
Williams, People v.	122
Williams, Simpson v.	205
Williams, Turlock Irr. Dist. v.	44
Wilshire, Southern Cal. etc. Co. v.	217, 298, 300, 302
Wilson v. Cleveland	268
Wilson, Sander v.	37
Wing, Clough v.	38, 58, 334
Wunsor, Crane v.	153
Winter, Schultz v.	247
Winter v. Winter	278
Wixon v. Bear River etc. Co.	17, 34, 74, 236
Wolf v. St. Louis etc. Co.	202
Womersley v. Church	239
Woodbridge Dist., Hutson v.	122
Wood v. Edes	290
Wood v. Etiwanda etc. Co.	53, 98, 160, 263
Wood v. Lowney	187
Woodruff, Healy v.	93, 96, 99, 100, 105, 106
Woodruff v. North Bloomfield Co.	236, 238, 244
Woods, Crandall v.	11, 33, 35, 37, 78, 80, 84, 143
Woolman v. Garringer	74, 150, 153, 164
Wright v. Seymour	116
Yankee Jim etc. Co. v. Crary	88, 180, 278
Yarwood v. West Los Angeles	125, 294
Young, Vestal v.	199, 241
Yuba Co. v. Cloke	155
Zimmler v. San Luis etc. Co.	87, 193, 203

The general law of appropriation of water will be found discussed in the following books:

YALE ON MINING CLAIMS AND WATER RIGHTS (1867). Best for the history of the subject and its discussion of the early California cases.

BLANCHARD AND WEEKS ON MINING CLAIMS AND WATER RIGHTS.

POMEROY ON RIPARIAN RIGHTS. Written to stay the encroachment of the law of appropriation upon the common law of riparian rights, and to vindicate what is now called the California doctrine—a recognition of both systems. An edition edited by H. C. Black is referred to as Black's Pomeroy. In the present book, references are to the original edition of 1887.

LINDLEY ON MINES. For the general public land law, and for the principles governing pollution of waters by mining.

WORKS ON IRRIGATION (1900). Contains a discussion of the laws of canal companies as public service corporations.

KINNEY ON IRRIGATION (1894).

LONG ON IRRIGATION (1901).

FARNHAM ON WATERS (1904).

ARTICLE "IRRIGATION," in 17 American and English Encyclopedia of Law, 485, by the author of "Long on Irrigation."

NOTES TO AMERICAN STATES REPORTS AND LAWYERS' REPORTS ANNOTATED, especially 43 Am. Dec. 269, 60 Am. St. Rep. 799, 93 Am. St. Rep. 711, 30 L. R. A. 665.

WATER RIGHTS

IN THE

WESTERN STATES.

CHAPTER I.

HISTORICAL REVIEW.

A. ORIGIN OF THE DOCTRINE OF APPROPRIATION.

§ 1. California before the arrival of pioneers.
§ 2. Mexican law.
§ 3. Customs of miners.
§ 4. The customs and the court.
§ 5. Irwin v. Phillips.

B. DEVELOPMENT OF THE DOCTRINE.

§ 6. Irwin v. Phillips followed.
§ 7. Was this new rule to be made to conform to the common law of riparian rights?
§ 8. Was this judicial legislation?
§ 9. How far applicable to other pursuits than mining?

C. EARLY LEGISLATION.

§ 10. Federal statutes of 1866 and 1870.
§ 11. Comments on these Federal statutes.
§ 12. State legislation in California.

D. THE CONFLICT OVER RIPARIAN RIGHTS.

§ 13. Private title to land and new industries.
§ 14. The law and irrigation.
§ 15. Riparian rights before Lux v. Haggin.
§ 16. Lux v. Haggin.
§ 17. Result of Lux v. Haggin.
§ 18. Principle of Lux v. Haggin approved in nine States.
§ 19. Principle of Lux v. Haggin rejected in seven States.

E. LATER AND RECENT LEGISLATION.

§ 20. Irrigation codes.
§ 21. Irrigation districts.
§ 22. Statement of the doctrine of appropriation.

A. ORIGIN OF THE DOCTRINE OF APPROPRIATION.

§ 1. **California Before the Arrival of Pioneers.**—The law of appropriation of water originated among the miners of California, in the earliest days of that State, whence it has been copied in all the Western States and Territories viz.: Arizona, California, Colorado, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington and Wyoming.[1] After the discovery of gold in California in 1849, the men who came there in such numbers were from all parts of the country, even of the world. Their spirit was the rough-and-ready one of the pioneer, who meets new conditions in the way best at hand, not bound to follow the ways of the places he left behind if they do not suit his purpose. Their very coming to a strange wilderness was itself a breach of precedent. They left behind them much of the established law of real property.[2]

Nor did they find much established law of any kind where they came. California was, at the beginning of the century, a Spanish missionary territory. That part to which the miners came was known to the Mexicans as Alta California, and was regarded as only a set of colonies extending northward from the original settlements in Baja California, the peninsula, which is still Mexican territory.[3] Under the Spanish rule that pre-

1 See *infra*, secs. 18, 19.

2 As to the common-law rules concerning waters, see chapter XIII. *infra*.

3 See Royce, "California," in the American Commonwealth Series.

ceded the Mexican Revolution, these colonies were on the outskirts of civilization, needing but few laws, and little regard being paid to the strict letter of even those.

With the revolution which severed Mexico from the Spanish Crown came disorder and disorganization. The missions were broken up, the presidios neglected, and no new system was adopted and enforced in place of the one which had fallen into disuse. Land had never been, previously to the acquisition of the country by the Americans, of much value. The wealth of the colonists consisted principally in their cattle and horses, which were sold for a trifling sum. During the disorders which characterized the Mexican régime, land can be said to have had scarcely any value—at all events, not a value worth the trouble and expense of procuring a perfect title under the colonization laws of Mexico and Spain. No mail facilities were enjoyed—long journeys had to be made to the capital of the province, in the midst of civil disorders and revolution, in order to procure a perfect title. Men could not always, perhaps but seldom, be found, who were capable of making the necessary surveys. This condition of things led, in some cases without taking any steps to obtain a title, in others after having taken only the incipient proceedings, to the practice of taking possession, or at least of claiming, large tracts of land which had not been surveyed, and the boundaries of which were undefined and even unknown. This system continued until the conquest of the country—until the discovery of gold—until the Americans thronged into Northern California, a portion of the country which could be said previously to have contained scarcely any population except Indians.[4]

[4] Preface by Judge Bennett to 1 Cal.

§ 2. **Mexican Law.**—What little Mexican law there had been upon the use of waters would, even if continued in force, have interfered little with the miners helping themselves to the water they wanted and had to have. The Mexican law regarded the waters as held by the pueblos (or agricultural villages) in trust for farmers on neighboring lands, and so left the water open to use by all in the neighborhood. This right in the whole neighborhood was superior to that of the individual proprietors through whose fields the stream chanced to run.[5] A little of this Mexican law is of force to-day, in California, in that some cities, notably, after much litigation, Los Angeles, have been held to succeed to the rights of a pueblo to public water supply.[6] The old Mexican law is worth mentioning chiefly as showing that what law there had been put little impediment in the way of the miners helping themselves to the waters they needed.

§ 3. **Customs of Miners.**—The miners were thrown upon their own resources, and had nothing to rely upon but the customs that they themselves by their acts and acquiescence established, and by equally rough-and-ready methods enforced. The fundamental principle to which these customs clung was that of "first come first served." It was the same in everything pertaining to mining. The right to mine, first of all in importance, was protected in the first possessor of the mining ground, and that has grown into the elaborate and intricate system of mining law which we have to-day. Water was a necessary incident to mining. It followed the same rule of first possession. Historically, the law of appropriation of waters is merely a branch of mining

5 Lux v. Haggin, 69 Cal. 255, 10 Pac. 674; Vernon Irr. Co. v. Los Angeles, 106 Cal. 237, 39 Pac. 762.

6 Ibid; Feliz v. Los Angeles, 58 Cal. 73; Los Angeles v. Pomeroy, 124 Cal. 597, 57 Pac. 585.

law. The custom was that the first to use the water had the exclusive right to it.[7]

These customs did not follow the common-law rules of riparian rights because, in the first place, the miners, left so largely to themselves, did not know those rules. The miners were of all nationalities, from places where many different systems of law prevailed. They went off into the wilderness where the law was not represented at all. Because, in the second place, the common-law rules would have been entirely unsuited to the conditions. Under such conditions the fine points of the law cannot be enforced. The rule of "first come first served" is nine points of the law, anyway, under such conditions, for defense equally as much as for offense, though the tenth point may be insisted upon by some distant court. It is easily understood, and, in a new region, just. On the other hand, the common law of riparian rights, with its varying method of adjustment, depending upon what is reasonable under the surrounding circumstances, is much more uncertain and refined, and its enforcement would have been difficult. Most important of all, however, was the necessity of carrying the water far from the stream without returning it, and making use of it in ways that the common law never had in mind. That, left to themselves, the miners would not be governed by the common-law rules of riparian rights, was inevitable.

These customs, it should be repeated, grew up among the miners, and were not rules that the lawyers originated among themselves. Lawyers in large numbers came, as they still come, to new mining camps. But the rough-and-ready spirit of mining camps carries them along with it. The lack of facilities for reference and study forces them to depend on their own argument

[7] See statement by reporter in Titcomb v. Kirk, 51 Cal. 289.

adapted to their surroundings, more than upon precedent.[8]

§ 4. **The Customs and the Court.**—When the State government was organized in California, and courts formed in 1850, the lawyers urged upon the courts not the common law of riparian rights, but this new custom of prior possession and use. As early as the third volume of the California Reports the matter was before the supreme court, but the court was not yet ready to declare this custom concerning the use of waters lawful.[9] The trial judge did adopt it as the basis of his charge. But the supreme court said: "The rule laid down by the court below, while it is a departure from all the rules governing this description of property, would be impracticable in its application, and we think it much safer to adhere to known principles and well-settled law, so far as they can be made applicable to the novel questions growing out of the peculiar enterprises in which many of the people of this state are embarked." Moreover, a sweeping statute had adopted the common law as the rule of decision generally.[10] And another had refused recognition to the customs of miners when in conflict with the laws of the State.[11]

This case of Eddy v. Simpson is interesting as foreshadowing the doctrine which afterward became the rule of the court, that prior possession of water gives the exclusive right to its use; and as showing the difficulties the court met in adjusting itself to the new conditions.[12]

8 In general, concerning the customs and regulations of miners in the early days, see Yale on Mining Claims and Water Rights, chapters VII, VIII; Lindley on Mines, sec. 40 et seq.

9 Eddy v. Simpson, 3 Cal. 249, 58 Am. Dec. 408.

10 Act of April, 1850.

11 Act of 1851.

12 The difficulties in the way of the court caused the court later

§ 5. **Irwin v. Phillips.**—The next case before the California court succeeded in having the doctrine of appropriation of water fully recognized and accepted. This case, Irwin v. Phillips, 5 Cal. 140, 63 Am. Dec. 113, decided in 1855, is always cited as the original precedent establishing the rule of appropriation. The case was between a canal owner who had diverted water from the public land, and a miner who had later located on public land from which the stream had been diverted. The opinion is of sufficient importance to be given in full. The court said:

"The several assignments of error will not be separately considered, because the whole merits of the case depend really on a single question, and upon that question the case must be decided. The proposition to be settled is whether the owner of a canal in the mineral region of this State, constructed for the purpose of supplying water to miners, has the right to divert the water of a stream from its natural channel, as against the claims of those who, subsequent to the diversion, take up lands along the banks of the stream for the purpose of mining. It must be premised that it is admitted on all sides that the mining claims in controversy, and the lands through which the stream runs and through which the canal passes, are a part of the public domain, to which there is no claim of private proprietorship; and

in a case involving the diversion of water to remark in Bear River Water Co. v. New York Min. Co., 8 Cal. 327, at 333, 68 Am. Dec. 325: "The business of gold mining was not only new to our people, and the cases arising from it new to our courts, and without judicial or legislative precedent, either in our own country or in that from which we have borrowed our jurisprudence; but there are intrinsic difficulties in the subject itself that it is almost impossible to settle satisfactorily, even by the application to them of the abstract principles of justice. Yet we are compelled to decide these cases, because they must be settled in some way, whether we can say after it is done that we have given a just decision or not."

that the miners have the right to dig for gold on the public lands was settled by this court in the case of Hicks et al. v. Bell et al., 3 Cal. 219.

"It is insisted by the appellants that in this case the common-law doctrine must be invoked, which prescribes that a watercourse must be allowed to flow in its natural channel. But upon an examination of the authorities which support that doctrine, it will be found to rest upon the fact of the individual rights of landed proprietors upon the stream, the principle being both at the civil and common law that the owner of lands on the banks of a watercourse owns to the middle of the stream, and has the right in virtue of his proprietorship to the use of the water in its pure and natural condition. In this case the lands are the property either of the State or of the United States, and it is not necessary to decide to which they belong for the purposes of this case. It is certain that at the common law the diversion of watercourses could only be complained of by riparian owners, who were deprived of the use, or those claiming directly under them. Can the appellants assert their present claim as tenants at will? To solve this question it must be kept in mind that their tenancy is of their own creation, their tenements of their own selection, and subsequent, in point of time, to the diversion of the stream. They had the right to mine where they pleased throughout an extensive region, and they selected the bank of a stream from which the water had been already turned, for the purpose of supplying the mines at another point.

"Courts are bound to take notice of the political and social condition of the country which they judicially rule. In this State the larger part of the territory consists of mineral lands, nearly the whole of which are the property of the public. No right or intent of dis-

position of these lands has been shown either by the United States or the State governments, and with the exception of certain State regulations, very limited in their character, a system has been permitted to grow up by the voluntary action and assent of the population, whose free and unrestrained occupation of the mineral region has been tacitly assented to by the one government, and heartily encouraged by the expressed legislative policy of the other. If there are, as must be admitted, many things connected with this system, which are crude and undigested, and subject to fluctuation and dispute, there are still some which a universal sense of necessity and propriety have so firmly fixed as that they have come to be looked upon as having the force and effect of *res judicata*. Among these the most important are the rights of miners to be protected in the possession of their selected localities, and the rights of those who, by prior appropriation, have taken the waters from their natural beds, and by costly artificial works have conducted them for miles over mountains and ravines, to supply the necessities of gold diggers, and without which the most important interests of the mineral region would remain without development. So fully recognized have become these rights, that, without any specific legislation conferring or confirming them, they are alluded to and spoken of in various acts of the legislature in the same manner as if they were rights which had been vested by the most distinct expression of the will of the lawmakers; as, for instance, in the Revenue Act 'canals and water-races' are declared to be property subject to taxation, and this when there was none other in the State than such as were devoted to the use of mining. Section 2 of article 9 of the same act, providing for the assessment of the property of companies and associations, among others

mentions 'dam or dams, canal or canals, or other works for mining purposes.' This simply goes to prove what is the purpose of the argument, that however much the policy of the State, as indicated by her legislation, has conferred the privilege to work the mines, it has equally conferred the right to divert the streams from their natural channels, and as these two rights stand upon an equal footing, when they conflict, they must be decided by the fact of priority, upon the maxim of equity, '*Qui prior est in tempore, potior est in jure.*' The miner who selects a piece of ground to work, must take it as he finds it, subject to prior rights, which have an equal equity, on account of an equal recognition from the sovereign power. If it is upon a stream, the waters of which have not been taken from their bed, they cannot be taken to his prejudice; but if they have been already diverted, and for as high and legitimate a purpose as the one he seeks to accomplish, he has no right to complain, no right to interfere with the prior occupation of his neighbor, and must abide the disadvantages of his own selection."

In view of some later decisions of the California court, it is well to notice that in Irwin v. Phillips there was no attempt on the part of the court or any member of the bench to apply the common-law rules of riparian rights in a modified form. There was no attempt to treat it as a mere modification of those rules, or as a blending of those rules with the new customs. On the contrary, the court, adopting the argument of counsel (afterward judge of the supreme court) Baldwin, expressly excluded riparian rights from a consideration of the case. The intention was to provide an entirely new system, wherever the mining customs prevailed.[13]

The rule of appropriation of water was thus estab-

13 Yale on Mining Claims and Water Rights, 161.

lished independently of legislation. The act of April, 1850, had adopted the common law as a general rule of decision in the State, and the act of 1851 had adopted the customs of miners where not in conflict with the laws of the State, and an act (mentioned in the opinion) had taxed ditches and canals; but closer than this there was nothing. Nor were the courts aided by direct legislation until the act of the Federal Congress of 1866.[14]

B. DEVELOPMENT OF THE DOCTRINE.

§ 6. **Irwin v. Phillips Followed.**—The contest between the common law and this general principle continued from this case till that of Crandall v. Woods,[15] decided in July, 1857, when Chief Justice Murray yielded to the weight of the authority of decided cases, and gave up the struggle. The doctrine was again assailed by counsel as late as McDonald v. Bear River Co.,[16] in 1859, but the matter passed unnoticed by the court.[17] In Logan v. Driscoll,[18] the court rebuked counsel for disputing it. Later the doctrine was affirmed by the supreme court of the United States.[19]

The cases succeeding Irwin v. Phillips were devoted to developing and defining. They were confronted in this by several questions at the very start.

§ 7. **Was This New Rule to be Made to Conform to the Common Law of Riparian Rights** as a mere modification

14 Yale on Mining Claims and Water Rights, 139.

15 8 Cal. 136.

16 13 Cal. 220.

17 Yale on Mining Claims and Water Rights, 157.

18 19 Cal. 623, 81 Am. Dec. 90.

19 Atchison v. Peterson, 87 U. S. (20 Wall.) 507, 22 L. ed. 414; Basey v. Gallagher, 87 U. S. (20 Wall.) 670, 22 L. ed. 452; Jennison v. Kirk, 98 U. S. 453, 25 L. ed. 240.

thereof, or was it entirely independent of the old rules arising out of riparian rights?

The common law of riparian rights regarded all landowners through whose land a stream flowed as on an equal footing, refusing to recognize any right by priority, and giving each a right to a reasonable use of the stream at any time.[20] The doctrine of appropriation was unknown to the common law.[21] In Phoenix Water Co. v. Fletcher, 23 Cal. 481, and in Hill v. Smith, 27 Cal. 476, are found two important cases where the court argued that the rights of an appropriator were limited to a reasonable use, under the doctrine of riparian rights that the amount, manner, means, etc., of use were limited in that way.[22]

But, as already pointed out, the original case of Irwin v. Phillips had repudiated that doctrine entirely. In Hill v. King,[23] the court had again done the same. The cases, taken as a whole, now firmly establish that the rights of appropriation are deduced from the early customs of miners and not from the rules of riparian rights, so that the test is not whether a use is reasonable, but whether it is prior in time. It is firmly settled that the rights rest upon the maxim "*Qui prior est in tempore, potior est in jure.*" The rules developed have in no way conformed to the test of reasonableness under riparian rights as will be seen later. Riparian rights and appropriation have become established as each entirely distinct and independent of the other, even in

20 Mason v. Hill, 5 Barn. & Adol. 1; Pomeroy on Riparian Rights, sec. 4 et seq. See chapter XIII, *infra*.

21 Ibid; Pomeroy on Riparian Rights, sec. 21; Lux v. Haggin, 69 Cal. 255, 10 Pac. 674.

22 Compare, also, Salt Lake City v. Salt Lake etc. Co., 25 Utah, 456, 71 Pac. 1069.

23 8 Cal. 336.

jurisdictions where both systems are in force.[24] "The two doctrines stand side by side. They do not necessarily overthrow each other, but one supplements the other."[25]

§ 8. **Was This Judicial Legislation?**—It was urged that the California court was guilty of judicial legislation, since the statute of 1850 had expressly declared the common law to be the rule of decision in that State, generally. Judge Heydenfeldt defended the position of the court in this respect by claiming that the decisions accorded with a deeper common-law principle by which established customs are judicially noticed, and presumed, because of firm establishment, to be lawful. On this ground, he felt justified in saying in Conger v. Weaver, 6 Cal. 548:

"In the decisions we have heretofore made upon the subject of private rights to the public domain, we have applied simply the rules of the common law. We have found that its principles have abundantly sufficed for the determination of all disputes which have come before us; and we claim that we have neither modified its rules, nor have we attempted to legislate upon any pretended ground of their insufficiency." Then the learned judge, after saying that "one of the favorite and much indulged doctrines of the common law is the doctrine of presumption," and supporting that statement, proceeds:

"Every judge is bound to know the history and the leading traits which enter into the history of the country where he presides. This we have held before, and it also is an admitted doctrine of the common law. We must,

24 Lux v. Haggin, 69 Cal. 255, 10 Pac. 674; San Luis Water Co. v. Estrada, 117 Cal. 168, 48 Pac. 1075.

25 Crawford Co. v. Hathaway (Neb.), 93 N. W. 781.

therefore, know that this State has a large territory; that upon its acquisition by the United States, from the sparseness of its population, but a small comparative proportion of its land had been granted to private individuals; that the great bulk of it was land of the government; that but little, as yet, has been acquired by individuals by purchase; that our citizens have gone upon the public lands continuously, from a period anterior to the organization of the State government to the present time; upon these lands they have dug for gold; excavated mineral rock; constructed ditches, flumes and canals for conducting water; built mills for sawing lumber and grinding corn; established farms for cultivating the earth; made settlements for the grazing of cattle; laid off towns and villages; felled trees; diverted watercourses; and, indeed, have done, in the various enterprises of life, all that is usual and necessary in a high condition of civilized development. All of these are open and notorious facts, charging with notice of them not only the courts who have to apply the law in reference to them, but also the government of the United States, which claims to be the proprietor of these lands; and the government of the State, within whose sovereign jurisdiction they exist.

"In the face of these notorious facts, the government of the United States has not attempted to assert any right of ownership to any of the large body of lands within the mineral region of the State.

"The State government has not only looked on quiescently upon this universal appropriation of the public domain for all of these purposes, but has studiously encouraged them in some instances, and recognized them in all.

"Now, can it be said, with any propriety of reason or common sense, that the parties to these acts acquired

no rights? If they have acquired rights, these rights rest upon doctrine of presumption of a grant of right, arising either from the tacit assent of the sovereign, or from expression of her will in the course of her general legislation, and, indeed, from both."

This view, that the rules of possessory rights on the public lands are not in derogation of the common law, is of practical importance in deciding whether the statutes since passed affirming them are to be liberally or narrowly construed. The view that they rest on a grant (a presumed grant before the Federal statutes were passed; now an express grant because of those statutes), and that the United States had full common-law powers, as sole landowner, to make such grants, so that the rules are in entire accord with the common law, is elsewhere supported concerning possessory rights in general.[26] As to water, at all events, however, it is to-day recognized that the rule is in derogation of the common law.[27]

Rights equivalent to the possessory rights could, it is true, be granted by small owners without any hostility to the common law, but when done on such a comprehensive scale as to apply universally throughout a whole jurisdiction, the consistency with the common law becomes a remote matter. The inconsistency in detail is immediate. The common law developed a set of detailed rules on the supposition that individual grants were of minor importance. Grants and rights aside from grant were correlated and worked together into the system of riparian rights. By giving overwhelming

26 Lindley on Mines, secs. 535 et seq., 568.

27 Lux v. Haggin, 69 Cal. 255, 10 Pac. 674; Atchison v. Peterson, 87 U. S. 507, 22 L. ed. 414; Basey v. Gallagher, 87 U. S. 670, 22 L. ed. 452; Jennison v. Kirk, 98 U. S. 453, 25 L. ed. 240; Yale on Mining Claims and Water Rights, 129, 137; Pomeroy on Riparian Rights, sec. 20.

importance to the grant from the United States, this detailed system was distorted and displaced. The rights of individuals were readjusted in derogation of the old system. In Yale on Mining Claims and Water Rights,[28] the learned author says:

"The complaint of the supreme court was, in the opinion of some of its members, that they were compelled to take the place of the legislature in framing rules in regard to water rights. This was undoubtedly the case; the only rule adopted by the legislature touching the subject was the adoption of the common law as the rule of decision, by the act of April, 1850. It was therefore, as the chief justice said, left to the courts, and this can be admitted without injustice to the members of the court in the days of its early organization."

§ 9. **How Far Applicable to Other Pursuits Than Mining?** The California legislature, while, as has been said, providing no direct legislation concerning waters, by its early mining legislation indirectly complicated the question. The lands on which operations were carried on belonged to the United States and were not at the disposal of the State. But the State legislature, under the guise of regulating procedure in State courts, favored the miner against others. In 1852, the Possessory Act[29] allowed possessors of public lands to sue in State courts for interference with their possession; with a proviso excepting the possessors of lands for agriculture or grazing from protection against miners if the land contained mines. This was supplemented in 1855 by the Indemnity Act,[30] which required the miner who entered upon the agriculturist to give a bond for whatever

28 Page 129.

29 Stats. 1852, p. 158.

30 Act of April 25, 1855.

damages might follow to the agriculturist's improvements.

In spite of this favoritism shown the miner by the legislature, the supreme court declared its purpose as far as possible to place all pursuits on an equal footing.[31] The court restricted the operation of the statutes. They were held in no way to warrant interference with lands owned by good private title but only to public lands.[32] The proviso was restricted to such public lands only as were used strictly for agriculture or grazing and not applied to lands used for dwellings, town lots, sawmills, etc.[33] The latter two cases in the note held that appropriations of water to run a sawmill, being prior in time, prevailed against later appropriations by miners. Many cases affirmed this. Even in strictly agricultural uses, the court restricted the right of a miner to a mere right of entry, without the right to destroy any improvements whatsoever erected by the agriculturist, any such interference being held still a trespass; and that the preference amounted only to a right of entry on land, so that a water right of an agriculturist was protected even against miners.[34] The final result was that all pursuits were treated impartially as concerns waters.[35] In Rogers v. Soggs, cited *supra*, the court says: "Such, in general terms, are the rights of the miner; but these rights are subject to limi-

31 Tartar v. Spring etc. Mining Co., 5 Cal. 395; McDonald v. B. R. etc. Co., 13 Cal. 220; Wixon v. Bear River etc. Co., 24 Cal. 367, 85 Am. Dec. 69, and many other cases.

32 Tartar v. Spring etc. Mining Co., 5 Cal. 395; Boggs v. Merced, 14 Cal. 279; Smith v. Doe, 15 Cal. 100.

33 Fitzgerald v. Urton, 5 Cal. 308; Tartar v. Spring etc. Mining Co., 5 Cal. 395; Ortman v. Dixon, 13 Cal. 33.

34 Rogers v. Soggs, 22 Cal. 444; Levaroni v. Miller, 34 Cal. 231, 91 Am. Dec. 692.

35 Yale on Mining Claims and Water Rights, 139.

tations and restrictions, necessary to prevent an interference with rights of property vested in others, and which are entitled to equal protection with his own. Thus he has no right to use water to work his mine which has been appropriated to other legitimate purposes. (Irwin v. Phillips, 5 Cal. 140; Tartar v. The Spring Creek Water and Mining Co., 5 Cal. 395.) Nor has he a right to dig a ditch to convey water to his mine over land in the possession of another. (Burdge v. Underwood, 6 Cal. 45; Weimer v. Lowery, 11 Cal. 104.) Nor can he mine land used for a residence and for purposes connected therewith. (Fitzgerald v. Urton, 5 Cal. 308.) Or land used for houses, orchards, vineyards, gardens, and the like. (Smith v. Doe, 15 Cal. 101; Gillan v. Hutchinson, 16 Cal. 153.)"

The law to-day is stated as follows in Natoma etc. Co. v. Hancock[36] (discussing the case of Rupley v. Welch):[37]

"The point, and the only point, contended for by the defendants was that a prior appropriation of water for irrigation was of no avail against a subsequent appropriation for mining. The court merely decided that the appropriation for irrigation was good against miners as against others, and that the defendants could not prevent the water so appropriated from flowing into the reservoir prepared for impounding it. This is a doctrine which, at the present day, no one disputes, but in early mining times the paramount right of the miner was strenuously insisted upon by the miners, and in the mining sections often exercised with a high hand, as it was by the defendants in Rupley v. Welch, 23 Cal. 453."

The Possessory Act is still in force in California.[38]

36 101 Cal. 42, at 55, 31 Pac. 112, 35 Pac. 334.

37 23 Cal. 453.

38 Gray v. Dixon, 74 Cal. 508, 16 Pac. 305.

The Indemnity Act was held unconstitutional,[39] but was later upheld.[40]

C. EARLY LEGISLATION.

§ 10. **Federal Statutes of 1866 and 1870.**—In 1866 and 1870 Congress enacted statutes upon the subject. The provisions of these statutes are now incorporated in Revised Statutes, sections 2339, 2340, which are as follows:

Rev. Stats., sec. 2339: "Whenever, by priority of possession, rights to the use of water for mining, agricultural, manufacturing or other purposes, have vested and accrued, and the same are recognized and acknowledged by the local customs, laws, and decisions of courts, the possessors and owners of such vested rights shall be maintained and protected in the same; and the right of way for the construction of ditches and canals for the purposes herein specified is acknowledged and confirmed; but whenever any person, in the construction of any ditch or canal, injures or damages the possession of any settler on the public domain, the party committing such injury or damage shall be liable to the party injured for such injury or damage."[41]

Rev. Stats., sec. 2340: "All patents granted, or preemption or homesteads allowed, shall be subject to any vested and accrued water rights, or rights to ditches and reservoirs used in connection with such water rights, as may have been acquired under or recognized by the preceding section."[42]

§ 11. **Comments on These Federal Statutes.**—In Hobart v. Ford, 6 Nev. 77, Lewis, C. J., speaks of Revised Stat-

39 Gillan v. Hutchison, 16 Cal. 153.
40 Rupley v. Welch, 23 Cal. 452.
41 A. C. July 26, 1866, sec. 9.
42 A. C. July 9, 1870, sec. 17.

utes, section 2339, as: "This section, which by its turbid style and grammatical solecisms, more surely than by the enacting clause of the act, is shown to be a production of Congress, may be found on page 253, volume 14, of the Statutes at Large.

"In its adoption there appear to have been three distinct objects in view: First, the confirmation of all existing water rights; second, to grant the right of way over the public land to persons desiring to construct flumes or canals for mining or manufacturing purposes; and third, to authorize the recovery of damages by settlers on such land, against persons constructing such ditches or canals, for injuries occasioned thereby. That this section grants the right of way over public land to all who may desire to construct ditches or canals for mining or agricultural purposes, is about as clear and certain as the objects and purposes of the acts of Congress usually are. It is true, the most apt words to indicate this purpose are not employed. That could scarcely be expected; but the right of way for the construction being 'acknowledged' and confirmed, indicated the grant of a new right rather than the confirmation of an old one,[43] enjoyed at the time of the passage of the act. The confirmation or recognition of existing rights seems to be the object sought to be accomplished by the first clause of the section. To hold that the second clause simply reiterated the same thing might be warranted by the practice of Congress, but not by the rules of construction which must govern the courts in the interpretation of all laws. Again, the last provision of the section strengthens the view that such right of way is granted, for it authorizes the recovery of damages by the settler on the public land for injuries result-

43 Cf., however, *infra*, upon this section.

ing from the construction of ditches and canals after the passage of the act."[44]

The following from Jennison v. Kirk, 98 U. S. 453, (per Mr. Justice Stephen J. Field), will show the history of these Federal statutes; and this is also a convenient place to set forth the views of the supreme court of the United States on the law of appropriation:[45]

"The object of the section was to give the sanction of the United States, the proprietor of the lands, to possessory rights, which had previously rested solely upon the local customs, laws and decisions of the courts, and to prevent such rights from being lost on a sale of the lands. The section is to be read in connection with other provisions of the act of which it is a part, and in the light of matters of public history relating to the mineral lands of the United States. The discovery of gold in California was followed, as is well known, by an immense immigration into the State, which increased its population within three or four years from a few thousand to several hundred thousand. The lands in which the precious metals were found belonged to the United States, and were unsurveyed, and not open, by law, to occupation and settlement. Little was known of them further than that they were situated in the Sierra Nevada Mountains. Into these mountains the emigrants in vast numbers penetrated, occupying the ravines, gulches and canyons, and probing the earth in all directions for the precious metals. Wherever they went,

44 Held, under this act, the question of eminent domain is not involved; the building of a ditch was upheld without condemnation proceedings.

45 See, also, Atchison v. Peterson, 87 U. S. 507, 22 L. ed. 414; Basey v. Gallagher, 87 U. S. 670, 22 L. ed. 452; Broder v. Natoma Water Co., 101 U. S. 247, 25 L. ed. 790; United States v. Rio Grande Irr. Co., 174 U. S. 690, 19 Sup. Ct. Rep. 770, 43 L. ed. 1136; Sturr v. Beck, 133 U. S. 541, 10 Sup. Ct. Rep. 350, 33 L. ed. 761; Kansas v Colorado, 185 U. S. 125, 22 Sup. Ct. Rep. 552, 46 L. ed. 838; Bear

they carried with them that love of order and system and of fair dealing which are the prominent characteristics of our people. In every district they occupied. they framed certain rules for their government, by which the extent of ground they could severally hold for mining was designated, their possessory right to such ground secured and enforced, and contests between them either avoided or determined. These rules bore a marked similarity, varying in the several districts only according to the extent and character of the mines; distinct provisions being made for different kinds of mining, such as placer mining, quartz mining, and mining in drifts or tunnels. They all recognized discovery, followed by appropriation, as the foundation of the possessor's title, and development by working as the condition of its retention. And they were so framed as to secure to all comers, within practicable limits, absolute equality of right and privilege in working the mines. Nothing but such equality would have been tolerated by the miners, who were emphatically the lawmakers, as respects mining, upon the public lands in the State. The first appropriator was everywhere held to have, within certain well-defined limits, a better right than others to the claims taken up; and in all controversies, except as against the government, he was regarded as the original owner, from whom title was to be traced. But the mines could not be worked without water. Without water the gold would remain forever buried in the earth or rock. To carry water to mining localities, when they were not on the banks of a stream or lake became, therefore, an important and necessary business in carrying on mining. Here, also, the first appropriator of water to be conveyed to such localities for mining

Lake etc. Co. v. Garland, 164 U. S. 1; Telluride etc. Co. v. Rio Grande etc. Co., 187 U. S. 579; Gutierres v. Albuquerque etc. Co., 188 U. S. 545.

or other beneficial purposes was recognized as having, to the extent of actual use, the better right. The doctrines of the common law respecting the rights of riparian owners were not considered as applicable, or only in a very limited degree, to the conditions of miners in the mountains. The waters of rivers and lakes were, consequently, carried great distances in ditches and flumes, constructed with vast labor and enormous expenditures of money, along the sides of mountains and through canyons and ravines, to supply communities engaged in mining, as well as for agriculturists and ordinary consumption. Numerous regulations were adopted, or assumed to exist, from their obvious justness, for the security of these ditches and flumes, and for the protection of rights to water, not only between different appropriators, but between them and the holders of mining claims. These regulations and customs were appealed to in controversies in the State courts, and received their sanction; and properties to the value of many millions rested upon them. For eighteen years, from 1848 to 1866, the regulations and customs of miners, as enforced and molded by the courts and sanctioned by the legislation of the State, constituted the law governing property in mines and in water on the public mineral lands. Until 1866, no legislation was had looking to a sale of the mineral lands. The policy of the country had previously been, as shown by the legislation of Congress, to exempt such lands from sale. In that year, the act, the ninth section of which we have quoted, was passed."

"The Senator of Nevada, Honorable William M. Stewart, the author of the act, in advocating its passage in the Senate, spoke in high praise of the regulations and customs of miners, and portrayed in glowing language the wonderful results that had followed the

system of free mining which had prevailed with the tacit consent of the government. The legislature of California, he said, had wisely declared that the rules and regulations of miners should be received in evidence in all controversies respecting mining claims, and, when not in conflict with the constitution or laws of the State or of the United States, should govern their determination; and a series of wise judicial decisions had molded these regulations and customs into 'A comprehensive system of common law, embracing not only mining law, properly speaking, but also regulating the use of water for mining purposes.' The miner's law, he added, was a part of the miner's nature. He had made it, and he trusted it and obeyed it. He had given the honest toil of his life to discover wealth, which, when found, was protected by no higher law than that enacted by himself, under the implied sanction of a just and generous government. And the act proposed continued the system of free mining, holding the mineral lands open to exploration and occupation, subject to legislation by Congress and to local rules. It merely reorganized the obligation of the government to respect private rights which had grown up under its tacit consent and approval. It proposed no new system, but sanctioned, regulated, and confirmed a system already established, to which the people were attached. (Cong. Globe, 1st Sess., 39th Cong., pt. IV, pp. 3225-3228.)"

It will thus be seen that the Federal statutes (now sections 2339, 2340, Revised Statutes of the United States) merely gave a formal sanction to the rules already established. Those rules had been built up in reliance on the tacit acquiescence of the United States, the true owner of the lands and waters on which appropriations were made, and these statutes acquiesced therein expressly, "a voluntary recognition of a pre-ex-

isting right rather than the establishment of a new one."[46] Appropriators to-day, at least in the States following the California system, always claim to deraign title ultimately under these Federal statutes.[47] These statutes are prospective in their operation.[48]

The contention in Hobart v. Ford (quoted *supra*), that these statutes established a new right, was disposed of by the supreme court of the United States in Broder v. Natoma Water Co., 101 U. S. 274, 25 L. ed. 790, saying: "We are of the opinion that it is the established doctrine of this court that rights of miners, who had taken possession of mines and worked and developed them, and the rights of persons who had constructed canals and ditches to be used in mining operations and for purposes of agricultural irrigation, in the region where such artificial use of the water was an absolute necessity, are rights which the government had, by its conduct, recognized and encouraged and was bound to protect before the passage of the act of 1866, and that the section of the act which we have quoted was rather a voluntary *recognition of a pre-existing right of possession,* constituting a valid claim to its continued use, than the establishment of a new one."

Further construing these statutes the United States supreme court has said: "It is very evident that Congress intended, although the language used is not happy, to recognize as valid the customary law with respect to the use of water which had grown up among the occupants of the public land under the peculiar necessities of their condition; and that law may be shown by

46 Osgood v. Water Co., 56 Cal. 571; Lux v. Haggin, 69 Cal. 255, 10 Pac. 674; Broder v. Natoma Water Co., 101 U. S. 274, 25 L. ed. 790; Pomeroy on Riparian Rights, secs. 17, 28.

47 Lux v. Haggin, 69 Cal. 255, at 339, 10 Pac. 674.

48 Ibid; Long on Irrigation, sec. 27.

evidence of the local customs, or by the legislation of the State or territory, or by the decisions of the court. The union of the three conditions in any particular case is not essential to the perfection of the right by priority; and in case of conflict between a local custom and a statutory regulation, the latter, as of superior authority, must necessarily control."[49]

In Gutierres v. Albuquerque etc. Co., 188 U. S. 545, it was held that these sections of the Revised Statutes sanction and confirm the statutes of a Territory upon waters as well as the statutes of a State, provided in either case the territorial or State statutes do not come within any constitutional limitations upon the legislative power of a Territory or State.

The construction of these statutes as the basis of the law of appropriation is further considered in the next chapter.

§ 12. **State Legislation in California.**—Shortly after these Federal laws went into effect, California adopted its codes (1872). In the Civil Code, thirteen sections (1410-1422) were devoted to this subject—a perfectly valid field for State legislation so long as not conflicting with the Federal statutes and within the constitutional limitations upon the legislative power of a State.[50] It is a part of the police power.[51] No substantial innovations were made and the California code merely settles, in legislative form, the decisions of the courts already made; a crystallization of the law of ap-

49 Basey v. Gallagher, 87 U. S. 670, 22 L. ed. 452.

50 Lux v. Haggin, 69 Cal. 255, 10 Pac. 674; Gutierres v. Albuquerque etc. Co., 188 U. S. 545.

51 White v. Farmers' etc. Co., 22 Colo. 191, 43 Pac. 1028, 31 L. R. A. 828.

propriation. No new rules were incorporated except in minor details that will be hereafter noted.[52]

The California code has been the basis of legislation in other States also,[53] and, until the adoption of the recent irrigation codes in the arid States, the law in all the Western States was generally modeled upon the California law as represented by the decisions of the California court and formulated in the Civil Code.

Until the enactment of these sections of the Civil Code, there was practically no State legislation upon the subject in any State.[54] Since then there had been practically none in California, though Pomeroy wrote his work on Riparian Rights to urge it. The State legislation in California since then has been chiefly devoted to irrigation districts, leaving the law of waters in general untouched. But more recently there has been extensive legislation in the arid States.[55]

D. THE CONFLICT OVER RIPARIAN RIGHTS.

§ 13. **Private Title to Land and New Industries.**—As has been seen, though water was appropriated for all sorts of uses from the start, yet mining was the paramount industry in California and use for mining predominated. But in the seventies and early eighties, conditions in California changed. The public lands were being rapidly taken up and bought by private persons, under Federal statutes, and the fee passed out of the United States to a large extent. Small farms and large ranches, orchards, towns, sprang up on what had before been vacant land. California grew into a settled agricul-

52 Pomeroy on Riparian Rights, 89; Blanchard and Weeks on Mining Claims and Water Rights, 696. See *infra*, chapter VI.

53 See *infra*, sec. 81.

54 Yale on Mining Claims and Water Rights, 129.

55 *Infra*, sec. 20, and Appendix B.

tural and commercial community resembling more and more the older States; and the pioneer conditions that had forced a departure from the common law were passing into the background as mining ceased to be the paramount industry. The rights of the landowner through whose land, now private, a stream flowed, never before used by anyone, became an important question.

§ 14. **The Law and Irrigation.**—The chief industry demanding water under these new conditions was irrigation. A well-known writer[56] declared that California largely owes her prominence to-day to irrigation, and that irrigation has reached its greatest development in that State. That in irrigation lies the future of the West, there can be no doubt. We may, then, digress a little, to set forth the great conflict of opinion as to whether the common law of riparian rights or the doctrine of appropriation is more favorable to development of the West, or whether either is inimical thereto.

In many of the Western States (a list of which is given below)[57] feeling runs high against any attempt to introduce the common-law rules of riparian rights, and it is said that appropriation is absolutely essential. In Idaho[58] the court rose against the "phantom of riparian rights," and declared appropriation the "lineal descendant of the law of necessity." In Utah,[59] speaking of riparian rights, it is declared: "It was ascertained that either that doctrine must be modified or that this country must remain a barren waste." In a Nevada case it is said: "Here the soil is arid and unfit for cul-

56 Kinney on Irrigation, sec. 339.

57 Sec. 19.

58 Drake v. Earhart, 2 Idaho, (756) 716, 23 Pac. 541.

59 Salt Lake City v. Salt Lake etc. Co., 25 Utah, 456, 71 Pac. 1069.

tivation unless irrigated by the waters of running streams. The general surface of the State is table lands, traversed by parallel mountain ranges. The great plains of the State afford natural advantages for conducting water, and lands otherwise waste and valueless become productive by artificial irrigation. The condition of the country and the necessities of the situation impelled settlers upon the public land to resort to the diversion and use of the waters. This fact of itself is a striking illustration and conclusive evidence of the inapplicability of the common-law rule."[60]

Quotations to this effect could be repeated from all the States given below, which reject the doctrine of riparian rights in toto.[61]

In the rest of the Western States[62] opinion is equally strong that the doctrine of riparian rights is a beneficial one when the two systems are enforced together, and that the law of appropriation alone is a system to be viewed with alarm. In California[63] the court says that it would not require a prophetic vision to see that the law of appropriation alone would result in a monopoly of the waters of the State by a few individuals. In Montana[64] the chief justice said that the common law of riparian rights is best adapted to irrigation, saying: "Water for irrigation in this country as naturally belongs to the lands through which the stream passes, in certain proportions, as in other countries it belongs to the land to supply the necessities of life." In Ne-

[60] Reno Smelting Works v. Stevenson, 20 Nev. 269, 19 Am. St. Rep. 364, 21 Pac. 317, 4 L. R. A. 60.

[61] See especially the quotations in Willey v. Decker, 11 Wyo. 496, 100 Am. St. Rep. 939, 73 Pac. 210.

[62] See list, sec. 18, below.

[63] Lux v. Haggin, 69 Cal. 255, at 309, 10 Pac. 674, quoted *infra*, sec. 231.

[64] Thorp v. Freed, 1 Mont. 651.

braska[65] the court arraigns the general law of appropriation, and says it breeds monopolies; leads to antagonism, strife, dissension, gross exactions, abuses; is detrimental to the public welfare; has given rise to interminable litigation.

The first thing that strikes attention in this conflict of opinion is thus expressed by the Nebraska court:[66] "In all States which, like our own, are but partially arid, the common law is in force. The States holding to the contrary rule are wholly within the arid regions." The relative merits of the two systems would appear to depend on the relative scarcity of water where the systems are to be applied.

The reason for the difference may lie somewhat deeper. California, where the common law is successfully in force, as well as appropriation, is as arid in some parts as are any of the other States. In one case,[67] speaking of certain California land, it was said: "The water was so scarce that the land was liable to dry up and blow away." Aridity is, however, outside of California, a characteristic of the pioneer regions today; or rather, because entirely arid, certain of the interior States are sparsely settled and not largely developed. Beyond the matter of aridity is the more fundamental consideration that the law of appropriation is a pioneer doctrine, one to fit the necessities of sparsely settled and rough regions of any kind. Where courts are fifty to a hundred miles across a desert, taking days of teaming over trying roads or even trails to reach them; where the difficulty of enforcing the law is great; where the rule of first come first served is

65 Farmers' Irr. Dist. v. Frank (Neb.), 100 N. W. 286.

66 Meng v. Coffey (Neb.), 93 N. W. 713, 60 L. R. A. 910.

67 Hewitt v. Story, 64 Fed. 510, 12 C. C. A. 250, 30 L. R. A. 265.

nine points of the law anyway, for defense equally as much as offense, though the tenth point may be insisted upon by some distant court; because that rule is certain, easily understood, and, in a new region, just—in such regions the more finely adjusted system of riparian rights must give way to a rougher system. On the other hand, in regions more closely settled, where the small holdings of land under private title are more numerous, and the water is needed for many but smaller tracts of land and the important enterprises are not merely a few on a large scale; where the machinery of the law runs more smoothly—in such regions the system of appropriation alone is inadequate, because based on too selfish a principle. For the more settled regions, even if arid, the California doctrine of combination of the two systems covers the defects of either alone, especially since it is self-adjusting, riparian rights coming in only in proportion to the settlement of the land, and not disturbing the previous appropriations that aided in bringing about that settlement.

The history we have been tracing of the doctrine shows that the pioneer conditions in California were the fundamental thing in giving rise to the whole doctrine of appropriation. In early California we saw that it was urged that it was peculiarly a mining doctrine, not to be applied to agriculture, and the court had much difficulty before it was accepted as a doctrine of general application and outlook. To-day, in the interior, the pendulum is swinging the other way; it is called peculiarly an irrigation doctrine. Neither in history nor results does this seem justified. It is neither an irrigation nor a mining doctrine; it is one admirably adapted to all pursuits so long as applied in a new region, but may with advantage be supplemented by the

common law of riparian rights as the regions become more settled and developed.[68]

Tested by results, the following quotation[69] concerning the results in the leading State upholding riparian rights as well as appropriation is significant:

"The State of California, constituting a large and important part of the field where the art of irrigation is practiced, is also the great model for the rest of the region regarding the practical development of its water supply, and in the use of water as applied to the purpose of irrigation. California is not only ahead in the development of her water supply and the number, size and boldness of design of her irrigation works, but that State is also superior to all other States and Territories of the arid West in her method of applying and utilizing the water. It is safe to say that California owes the larger portion of the prominence which it occupies to-day to the results of irrigation."

The common law of riparian rights is not regarded as hostile to irrigation where the combined system prevails, under what[70] is called the California doctrine, the origin of which it is now our object to describe.

68 See Clark v. Allaman (Kan.), 80 Pac. 571. In Pomeroy on Riparian Rights, page 264, the learned author says: "As Colorado and these Territories become more fully settled, especially by an agricultural population, this system of water regulation will inevitably give rise to an enormous amount of trouble, controversy, and litigation. It is impossible to conceive of legislation tending more than this to create strifes, conflicts, and breaches of the peace. The right of prior appropriation on the public streams was a most fruitful cause of litigation in California, as is shown by the great number of reported cases; but this is a feeble illustration of the litigation and controversy which must arise from the statutes of Colorado and of the various Territories when they come into full operation upon an increasing population."

69 From Kinney on Irrigation, sec. 339 (Mr. Kinney was a member of the Salt Lake Bar).

70 In Willey v. Decker, 11 Wyo. 496, 100 Am. St. Rep. 939, 73 Pac. 210.

§ 15. **Riparian Rights Before Lux v. Haggin.**—Soon after the doctrine of appropriation was established, the California court held, in Crandall v. Woods, that the new rule was by no means exclusive of riparian rights, and that those rights attached to the land through which a stream flowed, in favor of settlers thereon, as against all but appropriations actually made prior to settlement thereon.[71] The riparian land in Crandall v. Woods, however, was a mining claim. Moreover, the opinion was given by Chief Justice Murray at a time when he was attempting to shape the doctrine of appropriation as a mere modification of the common law of riparian rights, and not to recognize it as an entirely independent system. Moreover, in most of the cases arising thereafter wherein a party was a riparian proprietor, the result would have been the same on the principles of appropriation.[72] Before Lux v. Haggin it had become the prevalent impression that there had been a rejection *in toto* in California of the common law of riparian rights.[73] Beside the clear decision in Crandall v. Woods, however, there had been continual *dicta* that riparian rights might vest by prior occupation of land through which a stream flowed, and be good against later appropriators of the water—*e. g.*, Irwin v. Phillips[74] (the original precedent), saying: "If it is upon a stream the

71 Crandall v. Woods, 8 Cal. 136, affirmed in the same term in Leigh v. Independent Ditch Co., 8 Cal. 328.

72 E. g., Ferrea v. Knipe, 28 Cal. 340, 87 Am. Dec. 128. "This is the first case in these reports after that of Crandall v. Wood, 8 Cal. 136, where the controversy concerning water rights was between two farmers, or parties engaged in ranching, the plaintiff claiming under a settler": Yale on Mining and Water Rights, 199. The learned author further remarks that the result in that case would be the same under either rule.

73 See dissenting opinions in Lux v. Haggin; see Pomeroy on Riparian Rights, sec. 108.

74 5 Cal. 140.

waters of which have not been taken from their bed, they cannot be taken to his [meaning the landowner's] prejudice"; and Conger v. Weaver,[75] saying: "We have recognized the right to appropriate the water where no riparian rights intervene"; and Kelley v. Natoma Water Co.,[76] saying: "Possession or actual appropriation must be the test of priority in all claims to the use of water, whenever such claims are not dependent upon the ownership of the land through which the water flows."[77]

The question had become confused in this way; and hence the California Civil Code, which was merely declaratory of the decisions, reflected the confusion by its indefinite provision, "The rights of riparian proprietors are not affected by the provisions of this title,"[78] not saying what those rights were, nor where they attached. In Nevada, the case of Van Sickle v. Haines[79] had given the fullest recognition to the common law of riparian rights.[80]

§ 16. **Lux v. Haggin.**—A case arose out of the use of the Kern River for irrigation—the case of Lux v. Haggin, 69 Cal. 255, 10 Pac. 674, decided in 1886. The defendant, J. B. Haggin, having organized an irrigation company, claimed the right to divert the waters of the Kern River by an appropriation to that effect, denying that any vested rights which, under the rule of riparian

75 6 Cal. 548, 65 Am. Dec. 528.

76 6 Cal. 108.

77 And Wixon v. Bear River Co., 24 Cal. 367, 85 Am. Dec. 69; Ferrea v. Knipe, 28 Cal. 340, 87 Am. Dec. 128, and other cases. See cases cited in Lux v. Haggin, 69 Cal. 255, 10 Pac. 674; Pomeroy on Riparian Rights, sec. 109. Such, also, was the decision in Vansickle v. Haines, 7 Nev. 249 (since overruled), which was much relied on in Lux v. Haggin.

78 Sec. 1422.

79 7 Nev. 249.

80 Quoted *infra*, pp. 357, 358.

rights, would have prevented this, could be recognized in California. It is probably the most extended opinion in the California reports, covering, as it does, two hundred pages. The previous cases had almost all arisen out of mining, but here was one in the San Joaquin Valley, and it showed how the law must consider water rights of immense value, though where mining was in no way concerned. The court said, emphatically: "The doctrine of appropriation so called is not the doctrine of the common law."[81] But while a rule independent of the common law, it is not destructive of the rule of riparian rights, the court held. Those rights attach to all land as soon as it becomes private, remaining subject to appropriations made prior to that time, but free from all hostile appropriations thereafter made. Citing Crandall v. Woods, *supra*, the court declared this always to have been the law in California. Section 1422 of the Civil Code was held to be merely declaratory of this.[82] Riparian rights would further be protected on constitutional principles; to deny them would be taking the landowner's property without due process of law, and an unwarranted interference by the State with the primary disposal of the Federal lands.[83] The contention that the section of the Civil Code[84] providing that "The rights of riparian proprietors are not affected by the provisions of this title," merely referred to riparian rights attaching to Mexican grants, which had never been public land, or else to riparian rights existing at the date of the enactment of the Civil Code, the Civil Code having no prospective operation, were rejected. The system of riparian rights

81 Pages 387-399.

82 Pages 368, 375, 380.

83 Accord Crawford Co. v. Hathaway (Neb.), 93 N. W. 781, 60 L. R. A. 710.

84 Sec. 1422.

was declared to be in effect in California in full force, subject only to prior appropriations made before the land became private. The court decided against Haggin. That riparian rights were not done away with by the law of appropriation had all along been the contention of text-writers.[85]

§ 17. **Result of Lux v. Haggin.**—Riparian rights are now firmly established in California side by side with the law of appropriation. In theory, the two systems are of equal importance, and receive equal consideration from the court; but practically, since the larger part of the lands in California have now passed into private hands, the common law of riparian rights has a wider application.

In 1887, the year following the decision in Lux v. Haggin, section 1422 of the Civil Code, protecting the rights of riparian proprietors, was repealed;[86] but as Lux v. Haggin was decided largely independent of that section, the law in California remains undisturbed by this repeal. Many cases since then have affirmed Lux v. Haggin.[87] Recent cases in California show a decided tendency to cease citing the older cases on appropriation, assuming the doctrines there laid down as established and familiar law. This indicates that in California the law of appropriation has taken its place as a complete system, past the formative period in which the system may be said still to remain in the younger States.

§ 18. **Principle of Lux v. Haggin Approved in Nine States.**—The combined system, appropriation and ripa-

85 Pomeroy on Riparian Rights, chapters III, VII; Blanchard and Weeks on Mining Claims and Water Rights, p. 696.

86 Cal. Stats. 1887, p. 144.

87 *Infra*, sec. 18.

rian rights existing side by side, which, like the law of appropriation, was first firmly established in California, and has been called the "California doctrine,"[88] is in force in the following States: California,[89] Oregon,[90] Washington,[91] Montana,[92] North Dakota,[93] Nebraska,[94] Texas,[95] Kansas,[96] and South Dakota.[97] The doctrine was also applied in the supreme court of the United States,[98] affirming a case in the court of the Territory of Dakota.

§ 19. **Principle of Lux v. Haggin Rejected in Seven States and Territories.**—In the following States and Territories the common law of riparian rights is rejected *in toto*, Lux v. Haggin, and similar cases being commented upon and considered, but rejected. This has been called "the

88 Willey v. Decker, 11 Wyo. 496, 100 Am. St. Rep. 939, 73 Pac. 210.

89 Crandall v. Woods, 8 Cal. 136; Lux v. Haggin, 69 Cal. 255, 10 Pac. 674; Van Bibber v. Hilton, 84 Cal. 585, 24 Pac. 308, 598; Alta Land Co. v. Hancock, 85 Cal. 219, 20 Am. St. Rep. 217, 24 Pac. 645; Modoc etc. Co. v. Booth, 102 Cal. 151, 36 Pac. 431; McGuire v. Brown, 106 Cal. 660, 39 Pac. 1060; Hargrave v. Cook, 108 Cal. 72, 41 Pac. 18, 30 L. R. A. 390; Baxter v. Gilbert, 125 Cal. 580, 58 Pac. 129, 374; Bathgate v. Irvine, 126 Cal. 135, 77 Am. St. Rep. 158, 58 Pac. 442; Rice v. Meiners, 136 Cal. 292, 68 Pac. 817.

90 Carson v. Gentner, 33 Or. 512, 52 Pac. 506, 43 L. R. A. 130.

91 Benton v. Johncox, 17 Wash. 277, 61 Am. St. Rep. 912, 49 Pac. 495, 39 L. R. A. 107; Sander v. Wilson, 34 Wash. 659, 76 Pac. 280.

92 Smith v. Denniff, 24 Mont. 20, 60 Pac. 398, 81 Am. St. Rep. 408, 50 L. R. A. 741; though there is room for doubt as to the effect of this decision.

93 Bigelow v. Draper, 6 N. Dak. 152, 69 N. W. 570.

94 Crawford Co. v. Hathaway (Neb.) 93 N. W. 781.

95 McGhee etc. Co. v. Hudson, 85 Tex. 587, 22 S. W. 398, 976; Mud Creek etc. Co. v. Vivian, 70 Tex. 170, 11 S. W. 1078; Watkins etc. Co. v. Clements (Tex.), 86 S. W. 733.

96 Clark v. Allaman (Kan.), 80 Pac. 571, follows Lux v. Haggin in effect.

97 Lone Tree Ditch Co. v. Cyclone Ditch Co., 15 S. Dak. 519, 91 N. W. 352; Stenger v. Tharp (S. Dak.), 94 N. W. 402.

98 Sturr v. Beck, 133 U. S. 541, 10 Sup. Ct. Rep. 350, 33 L. ed. 761.

Colorado system":[99] Arizona,[100] Colorado,[101] Idaho,[102] New Mexico,[103] Nevada,[104] Utah,[105] and Wyoming.[106] In some of these the decision was the result of constitutional or statutory provision, cited and construed in the cases. In others, notably Nevada, it was reached without statute. In all of them the point is to-day covered by statute, however.[107] The constitutional provision relied on in Colorado was Colorado Constitution, article 16, sections 5 and 6; in Idaho, article 15, section 3; in Wyoming, article 1, section 31.

E. LATER AND RECENT LEGISLATION.

§ 20. **Irrigation Codes.**—In California and some of the States following the California doctrine, there has been no recent legislation directly affecting the law of waters. But in other States, chiefly the arid States, extensive codes have been adopted, within the last few years, based solely on the law of appropriation, and chiefly for the encouragement of irrigation, though applying to all pursuits. This legislation is still going on. In Utah, a code was adopted by the 1903 session of the

99 Long on Irrigation, sec. 6.

100 Clough v. Wing, 2 Ariz. 371, 17 Pac. 453; Austin v. Chandler (Ariz.), 42 Pac. 483.

101 Hammond v. Rose, 11 Colo. 526, 7 Am. St. Rep. 258, 19 Pac. 466; Coffin v. Left Hand Ditch Co., 6 Colo. 443.

102 Drake v. Earhart, 2 Idaho, 716, 23 Pac. 541.

103 Trambley v. Luterman, 6 N. Mex. 15, 27 Pac. 312; Albuquerque etc. Co. v. Gutierrez, 10 N. Mex. 177, 61 Pac. 357.

104 Reno etc. Co. v. Stevenson, 20 Nev. 269, 19 Am. St. Rep. 364, 21 Pac. 317, 4 L. R. A. 60; though Vansickle v. Haines, 7 Nev. 249, had been the other way.

105 Cole v. Richards Irr. Co., 27 Utah, 205, 101 Am. St. Rep. 962, 75 Pac. 376.

106 Moyer v. Preston, 6 Wyo. 308, 71 Am. St. Rep. 914, 44 Pac. 845; Willey v. Decker, 11 Wyo. 496, 100 Am. St. Rep. 939, 73 Pac. 210.

107 *Infra*, sec. 20, and Appendix B.

legislature[108] and repealed by the next, and a new code substituted[109] very similar and in parts identical. In Wyoming there is much legislation on this subject and this year a statute was passed appointing code commissioners to draft a new code to be presented to the next legislature.[110] In eight of these States and Territories this legislation was adopted in whole or in large part in 1905.

More or less elaborate codification in this line, having common characteristics, will be found in Colorado,[111] Idaho,[112] Nebraska,[113] Nevada,[114] New Mexico,[115] North Dakota, Oklahoma,[116] Oregon,[117] South Dakota,[118] Utah,[119] and Wyoming.[120] In Arizona[121] there are statutes somewhat similar to the above, but somewhat influenced by the civil law of acequias borrowed from Mexico.[122]

The main features of this new legislation are solely administrative. The substantive law concerning the extent of right, loss of right, and similar matters, remains as under the decisions of the courts, largely the

108 Laws Utah, 1903, c. 100.

109 Laws Utah 1905, c. 108.

110 Laws Wyo. 1905, p. 26. Likewise Montana, Stats. 1905, p. 184.

111 Const., art. 16; Mills' Ann. Stats., 1, 2, and the 1905 edition of volume 3. See Appendix.

112 Const., art. 15; Laws 1903, p. 223, with a few amendments in 1905.

113 Comp. Stats. 1903. See Appendix.

114 Comp. Laws 1900, and Sess. Laws 1901, 1903, 1905. See Appendix.

115 Laws 1905, p. 270, c. 102, and p. 284, c. 104.

116 Laws 1905, p. 274, c. 21. For North Dakota, see Appendix B.

117 Laws 1905, c. 228, p. 401.

118 Laws 1905, p. 201, c. 132.

119 Laws 1905, c. 108. See Appendix.

120 Const., arts. 1, 8; Rev. Stats. 1899, and Session Laws 1901, 1903, 1905. See Appendix.

121 Rev. Stats. 1901, p. 1045. See cases cited *ante*, sec. 19.

122 See, also, Texas Sayles' Civ. Stats. 1900, art. 3115 et seq.

early California decisions. The new statutes are chiefly administrative, providing for a proper enforcement of the rights defined by case law, and for a policing of the waters. The essentials of all these statutes consist in an enactment of the law of appropriation as the sole law on the subject of waters; a reorganization of the State for administrative purposes as concerns waters; a census, determination and listing of all existing appropriations; a comprehensive method of making appropriations hereafter; and various provisions for policing the waters.[123] In several, irrigation districts

123 The state engineers of six states met and formed the Association of State Engineers at Salt Lake City in May, 1904. The first regular meeting was held at Boise City, Idaho, in September, 1904. At this meeting the following resolutions were unanimously adopted:

1. "*Resolved*, that it is the sense of this association that the various States have the authority to regulate the diversion, appropriation and the use of water under the irrigation administrations now provided.

2. "*Resolved*, that it is the sense of this association that rights to the use of water should be limited to a definite volume for each season rather than to a definite flow for an indefinite period, and that the relation between the two should be regulated in accordance with average local conditions, some latitude being given to the irrigation administration.

3. "*Resolved*, that it is the sense of the association that the State Engineers should have discretionary powers in the approval of applications for new appropriations, subject to the review of the courts.

4. "*Resolved*, that it is the sense of this association that the maps accompanying applications for permits should be drawn from actual surveys, and that sufficient time should be allowed for perfecting maps, at the discretion of the State Engineer.

5. "*Resolved*, that it is the sense of this association that all water rights should be appurtenant to the land irrigated and inseparable therefrom except through a regular legal procedure of which the public has full knowledge, and beneficial use should be the basis, the measure and limit of the right.

6. "*Resolved*, that it is the sense of this association that the State Engineer should be made the responsible executive of the administration of water rights, and should be authorized to appoint, or at least nominate, his subordinates in the service."

based on the Wright Act of California are also provided for.[124]

The common law of riparian rights is not expressly mentioned in any of these statutes; but is indirectly rejected *in toto* by a provision that the right to appropriate unappropriated water shall never be denied;[125] or a provision that the right to waters can arise by appropriation and in no other way,[126] adding a phrase common in the States rejecting riparian rights *in toto*, that "beneficial use shall be the basis, the measure and the limit of all rights to the use of water."[127] In Idaho it is declared that the right to appropriate unappropriated water shall never be denied, and that priority of appropriation gives the better right in appropriation of water.[128] And similar provisions exist in all these statutes.

The only statute naming the common law of riparian rights in order to reject it is that of Arizona, which has not yet modeled its statutes upon the new irrigation codes. The Arizona statute says: "The common-law doctrine of riparian water rights shall not obtain or be of any force in this Territory."[129]

Most of the States adopting this legislation hostile to common law of riparian rights are, as has been said, the arid States, where the courts had previously taken the same attitude. In Nebraska, North Dakota, Oregon and South Dakota, however, the courts had previously followed the California doctrine recognizing and enforc-

124 *Infra*, sec. 21.

125 For example, Colo. Const., art. 16, sec. 6; Neb. Comp. Stats. 1903, sec. 6451; Wyo. Const., art. 8, sec. 3.

126 For example, Nev. Comp. Laws 1900, sec. 359; Utah Laws 1905, c. 108, sec. 34.

127 For example, Nev. Stats. 1903, p. 24, sec. 1; Utah Stats. 1905, c. 108, sec. 49.

128 Idaho Const., art. 15, sec. 3.

129 Rev. Stats. 1901, sec. 4168 (Civil Code).

ing the rights of riparian proprietors. In the last three, these statutes being only adopted within the year, there has been no chance for testing their effect upon the existing rights of riparian proprietors; but in Nebraska the matter gave rise to much litigation, and the court held[130] that it would be beyond the power of the legislature, after riparian rights had been recognized and vested, to deprive riparian owners of those rights hitherto enjoyed by them. Statutes such as these, the court held, may prevent anyone from acquiring riparian rights under the common law hereafter; but that is all. They cannot take away the rights of existing riparian owners, as it would be a taking of property without due process of law. In its opinion the court says:

"The right of a riparian proprietor to the reasonable use of water flowing in a natural channel is property, which is protected by the aegis of the constitution, and of which he cannot be deprived against his will, except for public use, and upon due compensation for the injury sustained. If the legislature had undertaken to sweep away and abolish this right, we would not be warranted in giving the act judicial sanction. Where, by any possible construction of a reasonable nature, legislation can be upheld, it is our duty to give it such a construction as will uphold, rather than destroy, it. The irrigation act of 1895 is valid when construed as not interfering with vested property rights which have been acquired by riparian proprietors. Such a construction, we are satisfied, is justified by a fair interpretation of the act in its entirety, and considering its tenor, purport, and the object intended to be accomplished by its enactment." And the court says later in the same case: "The irrigation act of 1889 abrogated

130 In Crawford v. Hathaway (Neb.), 93 N. W. 781, 60 L. R. A. 889.

in this State the common-law rule of riparian ownership in water, and substituted in lieu thereof the doctrine of prior appropriation. This legislation could not and did not have the effect of abolishing riparian rights which had already accrued, but only of preventing the acquisition of such rights in the future. The law of 1895 but continued in force the act of 1889 in so far as that act abrogated the common-law rule as to the rights of riparian proprietors, and since the taking effect of the act of 1889 those acquiring rights to the waters flowing in the natural channels of the State are to be tested and determined by the doctrine of prior appropriation."

The National Irrigation Act[131] does not directly affect the law of waters. It aims at the building of irrigation works by national financial and engineering aid under existing State laws concerning waters. The essence of the National Irrigation Act is that the United States as landowner provides for certain engineering projects upon its lands, to be carried out in conformity with State law. Indirectly it has had great influence, in that the irrigation codes of most of the States and Territories above mentioned were adopted largely for the purpose of forwarding the work of the Federal government.

§ 21. **Irrigation Districts.**—It is not our purpose to discuss the special law concerning irrigation districts, as it has left the general law of waters unchanged, using the latter as a basis, but not interfering with it. We may mention, however, that the California legislature first took up the matter in 1872, by passing an act[132] providing that owners of land susceptible of one mode of irrigation may join for the common purpose, contributing the water rights owned by each or acquir-

131 Given in full in Appendix A.

132 Stats. 1871-72, pp. 945-948.

ing new ones in the usual ways. Similar legislation already existed for the formation of "Reclamation Districts" to reclaim swamp lands.[133] In 1887[134] the statute well known as the "Wright Act" was passed, an elaborate statute providing for the formation of irrigation districts.[135] It is the basis of irrigation district legislation in other Western States. Much law has grown up around irrigation districts, which it is not our intention to discuss, since it left the law of waters unchanged. The act governing irrigation districts now in force in California was passed in 1897 and has been since amended. The rights of the district to water are no different than those of individuals, the water rights being held in trust for the landowners.[136]

133 *Infra*, sec. 71.

134 Act of March 7, 1887.

135 See Appendix A.

136 Merchants' Bank v. Escondido Irr. Dist., 144 Cal. 329, 77 Pac. 937.

Concerning irrigation districts, reference may be made to the following cases (see, also, cases concerning reclamation districts, cited in section 71, *infra*): Hagar v. Board of Supervisors, 47 Cal. 222 (containing a *dictum* that the law for the formation of reclamation districts to reclaim swamp land could be applied also to the formation of districts to irrigate lands); Turlock Irr. Dist. v. Williams, 76 Cal. 360, 18 Pac. 379, 2 L. R. A. 92 (upholding the constitutionality of the Wright Act and the right of an irrigation district to take property on eminent domain); Central Irrigation Dist. v. De Lappe, 79 Cal. 351, 21 Pac. 825 (relying on reclamation district cases, and concerning proceedings on organization of district, the inclusion and exclusion of land, and the issuance of bonds); Crall v. Poso Irr. Dist., 87 Cal. 140, 26 Pac. 797 (upholding the constitutionality of the Wright Act, and holding irrigation districts to be public corporations, also upholding the constitutionality of the confirmatory act whereby the validity of bonds is established); Board of Directors v. Tregea, 88 Cal. 334, 26 Pac. 237 (holding the confirmatory decree to be *in rem*, binding upon the whole world, and concerning the issuance of bonds, citing reclamation district cases on the conclusiveness of the decisions of the board of supervisors); Palmdale Irr. Dist. v. Rathbe, 91 Cal. 538, 27 Pac. 783; In re Madera Irr. Dist., 92 Cal. 296, 27 Am. St. Rep. 106, 28

Statutes for the formation of irrigation districts based on the Wright Act of California exist in Colo-

Pac. 272, 675, 14 L. R. A. 755 (again discussing and upholding the constitutionality of the Wright Act as legislation for a public purpose, relying on the reclamation district cases, and concerning confirmatory proceedings); People v. Turnbull, 93 Cal. 630, 29 Pac. 224 (holding districts public corporations); Tregea v. Owens, 94 Cal. 317, 29 Pac. 643 (concerning levy of assessments); Lindsay Irr. Co. v. Mehrtens, 97 Cal. 679, 32 Pac. 802; People v. Selma Irr. Dist., 98 Cal. 206, 32 Pac. 1047 (holding that *quo warranto* would not lie against an irrigation district); Rialto Irr. Dist. v. Brandon, 103 Cal. 384, 37 Pac. 484 (holding the confirmatory decree to be *in rem* concluding the whole world); Directors v. Abila, 106 Cal. 365, 39 Pac. 793 (holding that in confirmatory proceedings the directors have burden of proving validity of bonds and organization); Cullen v. Glendora Water Co., 113 Cal. 503, 39 Pac. 769, 45 Pac. 822, 1047 (holding that the statutory checks on the creation of bond liens by the board of directors should be strictly enforced); Hughson v. Crane, 115 Cal. 404, 47 Pac. 120, affirmed in Boskowitz v. Thompson, 144 Cal. 724, 78 Pac. 290 (concerning levy of assessments); In re Central Irr. Dist., 117 Cal. 382, 49 Pac. 354 (construing confirmatory act and distinguishing De Lappe case concerning organization proceedings and issuance of bonds); People v. Jefferds, 126 Cal. 296, 58 Pac. 704; People v. Linda Vista Irr. Dist., 128 Cal. 477, 61 Pac. 86 (the leading case concerning the nature of the decree of confirmation, holding that *quo warranto* by the attorney general to declare a district illegally organized would not lie, holding it collateral attack upon a decree *in rem*); Seehrist v. Rialto Irr. Dist., 129 Cal. 640, 62 Pac. 261); Escondido H. S. Dist. v. Escondido Seminary, 130 Cal. 128, 62 Pac. 401; People v. Perris Irr. Dist., 132 Cal. 289, 64 Pac. 399, 773 (affirming Linda Vista case); Stimson v. Allesandro Irr. Dist., 135 Cal. 389, 67 Pac. 496, 1034; Baxter v. Vineland Irr. Dist., 136 Cal. 185, 68 Pac. 601 (concerning levy of assessments); People v. Perris Irr. Dist., 142 Cal. 601, 76 Pac. 381 (affirming Linda Vista case, concerning collateral attack, but vacating confirmatory decree in direct attack on the ground of fraud); Merchants' Bank v. Escondido Irr. Dist., 144 Cal. 329, 77 Pac. 937 (concerning due process of law in the issuance of bonds); Boskowitz v. Thompson, 144 Cal. 724, 78 Pac. 290 (concerning the levy of assessments); Fallbrook Irr. Dist. v. Bradley, 68 Fed. 948; Miller v. Perris Irr. Dist., 85 Fed. 693; Shepard v. Tulare Irr. Dist., 94 Fed. 1; Herring v. Modesto Irr. Dist., 95 Fed. 705; Thompson v. Perris Irr. Dist., 116 Fed. 769; Perris Irr. Dist. v. Thompson, 116 Fed. 836; People v. Brown Valley Irr. Dist., 117 Fed. 538;

rado,[137] Idaho,[138] Kansas,[139] Nebraska,[140] Nevada,[141] Utah,[142] Washington.[143]

§ 22. **Statement of the Doctrine of Appropriation.**—Before closing this chapter it might be well to present the summary of general principles given by Judge Hawley.[144] While not intended as a complete review of the doctrine, it sets forth fundamental principles that are of frequent application to-day:

"Under the principles of prior appropriation, the law is well settled that the right to water flowing in the public streams may be acquired by an actual appropriation of the water for a beneficial use; that, if it is used for irrigation, the appropriator is only entitled to the amount of water that is necessary to irrigate his land by making a reasonable use of the water; that the object had in view at the time of the appropriation and diversion of the water is to be considered in connection with the extent and right of appropriation; that if the

Board of Supervisors v. Thompson, 122 Fed. 860; Marra v. San Jacinto Irr. Dist., 131 Fed. 780; Fallbrook Irr. Dist. v. Bradley, 164 U. S. 161, 41 L. ed. 369; Tregea v. Modesto Irr. Dist., 164 U. S. 179, 17 Sup. Ct. Rep. 52, 41 L. ed. 395; Tulare Irr. Dist. v. Shepard, 185 U. S. 8, 46 L. ed. 773.

137 3 M. A. S., 1905 ed., sec. 2309a et seq.

138 Laws 1899, p. 408; Laws 1903, p. 150.

139 Gen. Stats. 1899, secs. 3575-3598; Gen. Stats. 1901, sec. 3683 et seq.

140 Comp. Stats. 1899, secs. 5511-5574; Comp. Stats. 1903, sec. 6476 et seq.; Cobbey's Ann. Neb. Stats., sec. 6825 et seq.; Am. Stat. 1905, p. 649.

141 Comp. Laws 1900, secs. 374-423.

142 Rev. Stats. 1898, sec. 1287 et seq. Repealed, but leaving existing districts: See Stats. 1905, c. 108, sec. 71.

143 Ballinger's Code, secs. 4166-4249.

144 Hewitt v. Story, 64 Fed. 510, 12 C. C. A. 250, 30 L. R. A. 265, and repeated by him in Union etc. Min. Co. v. Dangberg (C. C. Nev.), 81 Fed. 73, and again repeated by the learned judge in Rogers v. Pitt, 129 Fed. 932.

capacity of the flume, ditch, canal, or other aqueduct, by means of which the water is conducted, is of greater capacity than is necessary to irrigate the lands of the appropriator, he will be restricted to the quantity of water needed for the purposes of irrigation, for watering his stock, and for domestic use; that the same rule applies to an appropriation made for any other beneficial use or purpose; that no person can, by virtue of his appropriation acquire a right to any more water than is necessary for the purpose of his appropriation; that, if the water is used for the purpose of irrigating lands owned by the appropriator, the right is not confined to the amount of water used at the time the appropriation is made; that the appropriator is entitled not only to his needs and necessities at that time, but to such other and further amount of water, within the capacity of his ditch, as would be required for the future improvement and extended cultivation of his lands, if the right is otherwise kept up; that the intention of the appropriator, his object and purpose in making the appropriation, his acts and conduct in regard thereto, the quantity and character of land owned by him, his necessities, ability, and surroundings, must be considered by the courts, in connection with the extent of his actual appropriation and use, in determining and defining his rights; that the mere act of commencing the construction of a ditch with the avowed intention of appropriating a given quantity of water from a stream gives no right to the water unless this purpose and intention are carried out by the reasonable, diligent, and intelligent, prosecution of the work to the final completion of the ditch, and diversion of the water to some beneficial use; that the rights acquired by the appropriator must be exercised with reference to the general condition of the country and the necessities of the community, and measured in

its extent by the actual needs of the particular purpose for which the appropriation is made, and not for the purpose of obtaining a monopoly of the water, so as to prevent its use for a beneficial purpose by other persons; that the diversion of the water ripens into a valid appropriation only where it is utilized by the appropriator for a beneficial use; that the surplus or waste water of a stream may be appropriated, subject to the rights of prior appropriators, and such an appropriator is entitled to use all such waters; that, in controversies between prior and subsequent appropriators of water, the question generally is whether the use and enjoyment of the water for the purposes to which the water is applied by the prior appropriator, have been in any manner impaired by the acts of the subsequent appropriator.

"These principles are of universal application throughout the States and Territories of the Pacific Coast."[145]

145 Citing cases.

CHAPTER II.

NATURE OF THE RIGHT OF APPROPRIATION.

A. RELATION TO THE GOVERNMENT.

§ 23. The United States or the State—California system.
§ 24. Appropriation as a grant under this system.
§ 25. The United States or the State—Colorado system.
§ 26. Comments on the Colorado view.
§ 27. Summary.

B. RELATION TO OTHER APPROPRIATORS.

§ 28. Priority governs.
§ 29. Successive appropriations.
§ 30. Periodical appropriations.
§ 31. Temporary appropriations.
§ 32. No partiality.

C. RELATION TO RIPARIAN PROPRIETORS.

§ 33. To subsequent settlers.
§ 34. To prior settlers.
§ 35. Prior settlers who hold the land in fee.
§ 36. Prior settlers before patent.
§ 37. Conclusion.

D. CHARACTERISTICS.

§ 38. The right is usufructuary.
§ 39. No property in the "*corpus*" of the water.
§ 40. No property in the channel.
§ 41. The right is exclusive.
§ 42. Independent of ownership or possession of land.
§ 43. Distinguished from right to a ditch.
§ 44. It is real estate.
§ 45. It is conditional.
§ 46. It is an incorporeal hereditament.
§ 47. Definition.

A. RELATION TO THE GOVERNMENT.

§ 23. The United States or the State—California System.—In California and the States following the California

doctrine, by "government" is meant the owner of the public lands, to which the doctrine of appropriation ultimately alone applies, and this is usually the United States, as the public lands were and still are chiefly Federal lands. But it may also signify the State where (as in comparatively few cases) title to the public land is in the State instead of in the United States. The principle is firmly settled under the California doctrine that the appropriator usually receives his rights from the United States as landowner of the public lands. The positions of the government as landowner and as lawmaker are kept entirely distinct.

By the treaty of Guadalupe Hidalgo the United States, at the time the miners arrived in California, had succeeded to the Mexican title and was the sole owner of the lands through which the streams wholly flowed, excepting only the few cases where Mexico had previously made grants of ranchos to private persons, which grants the United States respected. These lands were held by the United States, and, since the admission of the State into the Union, are now held (where not reserved or purchased for fortifications, etc.), as are held the lands of private persons, with the exception that they are not taxable, by reason of the contract to that effect. An incident to this sole ownership of the land was the right to the waters flowing through it. This right was the same as that acquired by the United States in its acquisition of any land, whether in California or Missouri; namely, the general common law being in force immediately upon the acquisition of American sovereignty at a time before the miners arrived, the right of a sole riparian proprietor. As original and sole riparian proprietor, the United States had unlimited right to do with the streams what it chose. It could grant the right to the water separate or else it

could grant the land and the right to the water together. It chose to do both. But chiefly, in the early days, it granted the right to the water separate, by silent acquiescence in the customs of the miners who usually took it that way. All these propositions are elaborately laid down in Lux v. Haggin, 69 Cal. 255, 10 Pac. 674, and it would be impossible to quote the words of the court at length here. These propositions are universally accepted in the States where the California doctrine is in force.[1]

As examples of the way these propositions are stated by the courts, the following must serve. In Lux v. Haggin, the court says:[2] "Recognizing the United States as the owner of the lands and waters, and as therefore authorized to permit the occupation or diversion of the waters as distinct from the lands, the State courts have treated the prior appropriator of water on the public lands of the United States as having a better right than a subsequent appropriator, on the theory that the appropriation was allowed or licensed by the United States. It has never been held that the right to appropriate waters on the public lands of the United States was derived directly from the State of California as the owner of innavigable streams and their beds. And since the act of Congress granting or recognizing a property in the waters actually diverted and usefully applied on the public lands of the United States, such rights have always been claimed to be deraigned by private persons under the act of Congress, from the recognition accorded by the act, or from the acquiescence of the general government in previous appropriations made with

1 See cases cited, sec. 18, *ante;* Kinney on Irrigation, secs. 135, 145, 188. The same views will be found in Pomeroy on Riparian Rights and Farnham on Waters, *passim.*

2 69 Cal. 255, at 339, 10 Pac. 674.

its presumed sanction and approval." In Cruse v. McCauley,[3] the court says: "In the eastern part of Montana the United States acquired its title to lands by virtue of what is called the 'Louisiana Purchase.' There cannot be one rule as to the right to the flow of water over its lands in Montana and another rule as to its lands in Iowa and Missouri. In these last-named States, there can be no doubt of the rule that the national government would be entitled to the water which is an incident to its land. As the United States then owns the waters which are an incident to its lands, it can dispose of them separate from its lands if it chooses." In Howell v. Johnson:[4] "The water in an innavigable stream flowing over the public domain is a part thereof, and the national government can sell or grant the same, or the use thereof, separate from the rest of the estate, under such circumstances as may seem to it proper."

§ 24. **Appropriation as a Grant Under This System.**—Under this view it is universally recognized that an appropriation constitutes a grant from the United States to the appropriator, originally implied from the silent acquiescence of the United States, now resting on sections 2339, 2340, Revised Statutes of the United States.[5] In Ortman v. Dixon, cited *supra,* for example, the court says: "We hold the absolute property in such cases to pass by appropriation as it would by grant." In Smith v. Hawkins:[6] "An appropriator of water under these circum-

3 96 Fed. 369.

4 89 Fed. 556 (C. C. Mont.), Knowles, J.

5 Conger v. Weaver, 6 Cal. 548, at 558, 65 Am. Dec. 528; Kidd v. Laird, 15 Cal. 161, 76 Am. Dec. 472; Ortman v. Dixon, 13 Cal. 33; Osgood v. El Dorado Water Co., 56 Cal. 571; Lux v. Haggin, 69 Cal. 255, 10 Pac. 674; Smith v. Hawkins, 110 Cal. 122, 42 Pac. 453; and many other cases might be cited if it were not that it is a principle accepted to-day in California without comment.

6 110 Cal. 122, 42 Pac. 453.

stances, and while the land which he subjects to his necessary uses continues to be a part of the public domain, is a licensee of the general government; but when such part of the public domain passes into private ownership, it is burdened by the easement granted by the United States to the appropriator, who holds his rights against this land under an express grant." In Barkley v. Tieleke,[7] the court says: "Under the law of Congress a grant of the kind of property in question is presumed by the act of appropriation." In Smith v. Denniff:[8] "A water right can, therefore, be acquired only by the grant, express or implied, of the owner of the land and water. The right acquired by appropriation and user of the water on the public domain is founded in grant from the United States government as the owner of the land and water. Such grant has been made by Congress."[9]

Further, the United States, as grantor, had power to impose conditions on the grant to the appropriator, and did so by recognizing the conditions imposed by the early customs of miners in California, especially the condition of beneficial use.[10]

An appropriation is, then, under the California doctrine, a conditional grant from the United States as grantor to the appropriator as grantee, and hence, because founded in grant, the limits of an appropriation must lie within the limits, whatever they may be, beyond which the United States had nothing to dispose of, never having owned, or having parted with. The

7 2 Mont. 59.

8 24 Mont. 20, 81 Am. St. Rep. 408, 60 Pac. 398, 50 L. R. A. 741.

9 Citing Wood v. Etiwanda Water Co., 122 Cal. 152, 54 Pac. 726; Welch v. Garrett, 5 Idaho, 639, 51 Pac. 405.

10 See Pomeroy on Riparian Rights, sec. 32; Kinney on Irrigation, secs. 147, 188.

system of appropriation could have effect only where the United States as landowner had power to permit it by grant. This must be insisted on because it is a fundamental principle to be carried through the subject. Incidentally it may be pointed out that, as an appropriation is a grant, it is a vested right with which a State cannot interfere without due process of law.[11] An appropriation given priority by an unconstitutional statute is not, however, a vested right within this protection, nor is the decision of a State court declaring such act unconstitutional an interference within the constitutional limitations; as those limitations are only on the legislative, not on the judicial power.[12]

The conclusion to be drawn from this matter is that under the California doctrine an appropriator receives his rights from the owner of the public lands as landowner, not as lawmaker, and that this is usually the United States and not the State. The legislative power of the State is limited to governing procedure in its courts,[13] or to matters within the police power,[14] and subject to the constitutional limitations against infringing on the powers of Congress, or interfering with the guaranty of vested rights.

§ 25. **United States or State—Colorado View.**—The view of the States following the Colorado system[15] (the distinctive result of which is the rejection of the common

11 Carson v. Gentner, 33 Or. 512, 52 Pac. 506, 43 L. R. A. 130, citing other Oregon cases; Howell v. Johnson (C. C. Mont.), 89 Fed. 556.

12 Lamar etc. Co. v. Amity etc. Co., 26 Colo. 370, 77 Am. St. Rep. 261, 58 Pac. 600; Mohl v. Lamar Canal Co., 128 Fed. 776. Just what ground the latter case went on, is not entirely clear. See, also, cases cited in 17 Am. & Eng. Ency. of Law, 494.

13 Lux v. Haggin, 69 Cal. 255, at 377, 10 Pac. 674.

14 White v. Farmers' etc. Co., 22 Colo. 143, 43 Pac. 1028.

15 *Ante*, sec. 19.

law of riparian rights *in toto)* goes not so much on the ground that the doctrine of appropriation rests on the sanction of United States, as on an entirely distinct ground; namely, that the common law was unsuited to Western conditions, and only such parts of the common law are brought by settlers into new communities as are suited to their conditions—a familiar doctrine. It rather denies that the United States as landowner was ever entitled to the rights of a riparian proprietor, because the law of the places where the lands lay never sanctioned riparian rights, for the above reason. Consequently no grantee of the United States can have riparian rights. Instead, appropriation is the sole law recognized. The appropriator looks for his rights to the State, and not the United States, these States usually having constitutional or statutory provisions expressly declaring that the ownership of all waters is in the State (or in the public), and that the right to the use thereof can be obtained by appropriation, and in no other way.

In Willey v. Decker,[16] the authorities in support of this view are presented. First setting forth the California view, the court says:[17]

"Upon that theory the right acquired by prior appropriation on the public domain is held to be founded in grant from the United States government, as owner of the land and water, under the acts of Congress of 1866 and 1870: U. S. Rev. Stats., secs. 2339, 2340; U. S. Comp. Stats. 1901, p. 1437.

"In this State, on the other hand, the common-law doctrine concerning the rights of a riparian owner in the water of a natural stream has been held to be un-

16 11 Wyo. 32, 100 Am. St. Rep. 925, 70 Pac. 726.

17 The following to page 60 is quoted from Willey v. Decker.

suited to our conditions; and this court has declared that the rule never obtained in this jurisdiction. (Moyer v. Preston, 6 Wyo. 308, 71 Am. St. Rep. 914, 44 Pac. 845.) It was said in the opinion in that case that 'a different principle better adapted to the material condition of this region has been recognized. That principle, briefly stated, is that the right to the use of water for beneficial purposes depends upon a prior appropriation.' And, further, in explanation of the reasons for the existence of the new doctrine, it was said: 'It is the natural outgrowth of the conditions existing in this region of country. The climate is dry, the soil is arid and largely unproductive in the absence of irrigation, but when water is applied by that means it becomes capable of successful cultivation. The benefits accruing to land upon the banks of a stream without any physical application of the water are few; and while the land contiguous to water, and so favorably located as to naturally derive any sort of advantage therefrom, is comparatively small in area, the remainder, which comprises by far the greater proportion of our land otherwise susceptible of cultivation, must forever remain in their wild and unproductive condition unless they are reclaimed by irrigation. Irrigation and such reclamation cannot be accomplished with any degree of success or permanency without the right to divert and appropriate water of natural streams for that purpose and a security accorded to that right. Thus, the imperative and growing necessities of our conditions in this respect alone, to say nothing of the other beneficial uses, also important, has compelled the recognition rather than the adoption of the law of prior appropriation.'

"In view of the contention in Colorado that until 1876 the common-law principles of riparian proprietor-

ship prevailed in that State, and that the doctrine of priority of right to water by priority of appropriation was first recognized and adopted in the constitution, the supreme court of that State, by Mr. Justice Helm, concluded a discussion of the matter as follows: 'We conclude, then, that the common-law doctrine giving the riparian owner a right to the flow of water in its natural channel upon and over his lands, even though he makes no beneficial use thereof, is inapplicable to Colorado. Imperative necessity, unknown to the countries which gave it birth, compels the recognition of another doctrine in conflict therewith. And we hold that, in the absence of express statutes to the contrary, the first appropriator of water from a natural stream for a beneficial purpose has, with the qualifications contained in the constitution, a prior right thereto, to the extent of such appropriation.' And it was further said that the latter doctrine has existed from the earliest appropriations of water within the boundaries of the State. (Coffin v. Left Hand Ditch Co., 6 Colo. 443.)

"When the question was first considered in the State of Nevada, the court held that the patentee of the government succeeded to all of its rights, and among these was the right to have the water of a stream theretofore diverted returned to its natural channel: Vansickle v. Haines, 7 Nev. 249. But that case was overruled in Jones v. Adams, 19 Nev. 78, 3 Am. St. Rep. 788, 6 Pac. 442. And in Reno Smelting etc. Works v. Stephenson, 20 Nev. 269, 19 Am. St. Rep. 364, 21 Pac. 317, 4 L. R. A. 60, it was unequivocally declared that the common-law doctrine of riparian rights was unsuited to the condition of that State. The court said: 'Here the soil is arid and unfit for cultivation unless irrigated by the waters of running streams. The general surface of the State is table-land, traversed by parallel mountain

ranges. The great plains of the State afford natural advantages for conducting water, and lands otherwise waste and valueless become productive by artificial irrigation. The condition of the country, and the necessities of the situation, impelled settlers upon the public lands to resort to the diversion and use of waters. This fact of itself is a striking illustration and conclusive evidence of the inapplicability of the common-law rule.'

"The leading case in Arizona is Clough v. Wing, 2 Ariz. 371, 17 Pac. 453. In that case it is said that the problem to be solved in the arid portions of the earth has not been how best to drain the water off the land and get rid of it, but how to save it to be conducted upon land in aid of the husbandman. The learned judge who wrote the opinion refers to the antiquity of irrigation in that section of country and in other lands, and remarks: 'Thus we see that this is the oldest method of skilled husbandry, and probably a large number of the human race have ever depended upon artificial irrigation for their food products. The riparian rights of the common law could not exist under such systems; and a higher antiquity, a better reason, and more beneficent results have flowed from the doctrine that all right in water in non-navigable streams must be subservient to its use in tilling the soil.' And, further, it is said that the common law, so far as the same applies to the uses of water, 'has never been, and is not now, suited to conditions that exist here.'

"The supreme court of Utah say: 'Riparian rights have never been recognized in this territory, or in any state or territory where irrigation is necessary; for the appropriation of water for the purpose of irrigation is entirely and unavoidably in conflict with the common-law doctrine of riparian proprietorship. If that had

been recognized and applied in this territory it would still be a desert; for a man owning ten acres of land on a stream of water capable of irrigating a thousand acres of land or more, near its mouth, could prevent the settlement of all the land above him. For at common law the riparian proprietor is entitled to have the water flow in quantity and quality past his land as it was wont to do when he acquired title thereto, and this right is utterly irreconcilable with the use of water for irrigation. The legislature of this territory has always ignored this claim of riparian proprietors, and the practice and usages of the inhabitants have never considered it applicable, and have never regarded it.' (Stowell v. Johnson, 7 Utah, 215, 26 Pac. 290.)

"In disposing of what the court calls the 'phantom of riparian rights,' and declaring that the maxim, 'first in time, first in right,' should be settled law in that jurisdiction, the supreme court of Idaho forcibly state the reasons for the new doctrine: 'Whether or not it is a beneficent rule, it is the lineal descendant of the law of necessity. When, from among the most energetic and enterprising classes of the East, that enormous tide of immigration poured into the West, this was found an arid land, which could be utilized as an agricultural country, or made valuable for its gold, only by the use of its streams of water. The new inhabitants were without law, but they quickly recognized that each man should not be a law unto himself. Accustomed, as they had been, to obedience to the laws they had helped make, as the settlements increased to such numbers as justified organization, they established their local customs and rules for their government in the use of water and land. They found a new condition of things. The use of water to which they had been accustomed, and the laws concerning it, had no application here. The

demand for water they found greater than the supply, as is the unfortunate fact still all over this arid region. Instead of attempting to divide it among all, thus making it unprofitable to any, or instead of applying the common-law riparian doctrine to which they had been accustomed, they disregarded the traditions of the past, and established as the only rule suitable to their situation that of prior appropriation. This did not mean that the first appropriator could take what he pleased, but what he actually needed, and could properly use without waste. Thus was established the local custom, which pervaded the entire West, and became the basis of the laws we have to-day on that subject.' (Drake v. Earhart, 2 Idaho (716), 750, 23 Pac. 541.)"[18]

Accompanying this view that the law of appropriation rests upon the inapplicability of any other rule are statutes or constitutional provisions expressly declaring that the ownership of all waters is in the State (or in the public). "In this and other jurisdictions where the common law in respect to the use of water and the right thereto is altogether ignored, there has been established, either by judicial decision or statute, or both, as an essential principle, that the water of all natural streams is the property of the public or of the State."[19]

All waters within the State are declared in Colorado,[20] Nevada[21] and Utah,[22] to be the property of the public; in Nevada[23] and Wyoming,[24] to be the property of the State.[25]

18 Beginning at page 55, *supra*, the above is quoted from Willey v. Decker, 11 Wyo. 496, 100 Am. St. Rep. 939, 73 Pac. 210.

19 Willey v. Decker, 11 Wyo. 496, 100 Am. St. Rep. 939, 73 Pac. 210.

20 Const., art. 16, sec. 5.

21 Stats. 1903, p. 24.

22 Stats. 1905, c. 108.

23 Comp. Laws 1900, sec. 534.

24 Const., art. 8, sec. 1.

25 Also Idaho Civ. Code 1901, sec. 2625.

And similar provisions exist in the other States following the Colorado view.

§ 26. **Comments on the Colorado View.**—The most obvious comment upon this declaration that water is the property of the State is the entire novelty of considering ownership of flowing water existing at all. It has long been a fundamental proposition that ownership of the corpus of running water cannot exist—it is in its nature incapable of ownership—the utmost right that can be acquired is solely usufructuary, the right to a use and flow. And the Idaho court, for example,[26] has construed such a provision to mean ownership of the usufructuary right only, and not to attempt to introduce the novel principle of ownership in the *corpus* of the water. This removes the most obvious objection to such provisions.

But, regarding the system of appropriation as having force only by the permission of the United States, the California and similar courts have great difficulty in understanding the view of those States which, following the Colorado system, declare that the appropriator receives his rights from the State alone, disregarding the rights of the United States as original sole riparian owner, or the riparian rights of the grantees of its land.

Granting that those parts of the common law which are inapplicable are not brought in by settlers, yet the rights of the United States antedated the settlement of the States in question.

Some right in the United States to the waters must have attached to the public land on its original acquisition by the United States under such treaties as the Louisiana Purchase or the treaty of Guadalupe Hidalgo.

[26] Boise etc. Co. v. Stewart (Idaho), 77 Pac. 25.

The difficulty is said to be that some right to the unused water flowing over the public lands of the United States was originally the property of the United States, and that a State cannot take the property from the United States or interfere with the primary disposal thereof without its consent, and that to take it from a grantee of the United States is a taking of property without due process of law, within the fourteenth amendment. That the original right of the United States before settlement of the land must have been that of sole riparian proprietor.[27] That the United States, having been sole riparian owner before the settlement of the land, no State can, by a declaration of law after settlement, take those rights from the United States or prevent it from giving riparian rights to its grantee, or take them away from its grantee. Thus, in Lux v. Haggin,[28] after holding that the right to the water on public lands originally must have belonged to the United States, as to any landowner, as parcel thereof, or an incident thereto, the court says: "But when the State is prohibited from interfering with the primary disposal of the public lands of the United States, there is included a prohibition of any attempt on the part of the State to preclude the United States from transferring to its grantees its full and complete title to the land granted, with all its incidents." In Cruse v. McCauley,[29] the court says: "In the eastern part of Montana the United States acquired its title to lands by virtue of what is called the 'Louisiana Purchase.' There cannot be one rule as to the right to the flow of water over its lands in Montana and another rule as to its lands in Iowa and Missouri." "If a person receives a patent from the United States

27 *Ante*, sec. 24.

28 69 Cal. 255, at 373, 10 Pac. 674.

29 96 Fed. 369.

for land subject only to accrued water rights, that is, existing water rights, and as an incident to or part of this land, there is water flowing over the same or upon the same, he would have all the rights the United States had at that time. I do not think any State law or custom can take away such rights except for some public purpose." And in Benton v. Johncox:[30] "But how it can be held that that which is an inseparable incident to the ownership of land in the Atlantic States and the Mississippi Valley is not such an incident in this as any other of the Pacific States, we are unable to comprehend." Numerous similar quotations could be made from other States in the list already given of the States following the California doctrine.[31]

As a direct answer to this objection, the Wyoming court has said[32] that the first Wyoming constitution contained provisions declaring the waters the property of the State, and rejecting riparian rights. This constitution was ratified by Congress on the admission of Wyoming into the Union; and thereby the United States consented to this system. But this cannot cover the point in States having no such constitutional provisions,[33] nor in those where such provisions rest on subsequent amendment or legislation which never had the express ratification of Congress.

Another answer relies on sections 2339 and 2340 of the Revised Statutes of the United States (Acts of 1866 and 1870),[34] as giving Federal sanction, and waiving the Federal right to object. Under the California doctrine

30 17 Wash. 277, 61 Am. St. Rep. 912, 79 Pac. 495, 39 L. R. A. 107.

31 *Ante*, sec. 18.

32 In Farm etc. Co. v. Carpenter, 9 Wyo. 110, 87 Am. St. Rep. 918, 61 Pac. 258, 50 L. R. A. 747.

33 Lux v. Haggin, 69 Cal. 255, at 352, 10 Pac. 674.

34 *Ante*, sees. 10 and 11.

these statutes merely confirmed the right to appropriate, but did nothing more, as already discussed. The courts following the Colorado system, however, construe those sections as also negativing all other rights; and as a general sweeping permission to the Western States to deal with waters as they saw fit. But the narrower (the California) construction has been applied by the supreme court of the United States.[35] It may be that the supreme court of the United States if the question comes before it, will hold that these Federal statutes are to be construed differently in different States, according to "the local customs, laws, and decisions of courts." In support of this special construction of the Federal statutes for the arid States, the general policy of the Federal government in dealing with its arid lands is usually referred to, the United States having, in dealing with specific tracts of arid land, specially encouraged and favored the law of appropriation.[36] Thus in Farm etc. Co. v. Carpenter:[37] "If any consent of the general government was primarily requisite to the inception of the rule of prior appropriation, that consent is to be found in several enactments by Congress, beginning with the act of July 26, 1866, and including the desert land act of March 3, 1877. Those acts have been too often quoted and are too well understood to require a restatement at this time at the expense of unduly extending this opinion."

As in the case just quoted, the reference to these Federal statutes is usually made in a general and indefinite way. The court says the construction of those acts is too well understood to require restatement, and yet its reference to them is for a much broader purpose

35 Sturr v. Beck, 133 U. S. 541, 10 Sup. Ct. Rep. 350, 33 L. ed. 761.

36 See Appendix A.

37 9 Wyo. 110, 87 Am. St. Rep. 918, 61 Pac. 747, 50 L. R. A. 747.

than that for which the California and similar courts refer to them. The purpose of the Colorado, Wyoming, and similar courts seems to be as follows: That those sections broadly sanctioned a new system. If the local customs, laws and decisions considered waters as owned by the State and ignored riparian rights, then such was the system sanctioned by the Federal government, and as such is consequently binding on the government's grantees of land who would otherwise have had riparian rights. That whether riparian rights are abolished depends on the local decisions of each State where local customs, laws, and decisions were sanctioned.

But, as a rule, no direct answer is sought. In a general way, the courts speak, as shown by the quotations above, of the sovereignty of the State as lawmaker having power to declare or change the law within the State; though manifestly that is subject to the constitutional limitations invoked by the California and other courts.[38]

38 Compare the *dicta* in United States v. Rio Grande Dam & I. Co., 174 U. S. 690, 19 Sup. Ct. Rep. 770, 43 L. ed. 1136: "Although this power of changing the common-law rule as to streams within its dominion undoubtedly belongs to each State, yet two limitations must be recognized: First, that in the absence of specific authority from Congress a State cannot by its legislation destroy the right of the United States, as the owner of lands bordering on a stream, to the continued flow of its waters"; adding at least as far as may be necessary for the beneficial uses of the government property, and adding a second limitation where the State change of the common law interferes with the navigability of a navigable stream.

Compare, however, the following: In a case involving title to an island in a stream in Nebraska, the supreme court of the United States said, in Whitaker v. McBride, 197 U. S. 510: "The decision of the supreme court of the State was that the owner of lands bordering on a river owns to the center of the channel, and takes title to any small bodies of land on his side of the channel that have not been surveyed or sold by the government. It is the settled rule that the question of the title of a riparian owner is one of local law. In Hardin v. Jardon, 140 U. S. 371, the matter was discussed at some length, the authorities cited, and the conclusion

Relying then, on the general propositions that the common law is inapplicable, and that public policy demands public property in the waters, the Colorado view is close to denying that the United States ever had any right to the waters flowing over its land; a doctrine which, in the early California days when the law of appropriation arose, would not have been tolerated for a moment. The fullest rights in those days were accorded to the United States, supporting appropriation upon its generosity solely. The constitutional objections against such a State fiat urged by the courts following the California doctrine seem of great weight. But relying instead on a broad construction of sections 2339 and 2340 of the Revised Statutes of the United States, as a waiver of all Federal rights to accord with local customs, laws, and decisions, the question becomes one solely of local statutory construction. In this connection, however, the California view has this advantage—that it favors the rights of the United States as landowner, and has been applied by the supreme court of the United States,[39] whereas the Colorado view is in derogation of the rights of the United States, and has not been directly passed upon by the supreme court of the United States.

The following passage from the opinion of the supreme court of the United States (Mr. Justice White

thus stated by Mr. Justice Bradley, delivering the opinion of the court (page 384):

"'In our judgment the grants of the government for lands bounded on streams and other waters, without any reservation or restriction of terms, are to be construed as to their effect according to the law of the State in which the lands lie.'"

This was said, however, in a case concerning title to an island in a stream in a State where riparian rights were upheld, and the words were used in a different connection from that which we are discussing.

39 Sturr v. Beck, 133 U. S. 541, 10 Sup. Ct. Rep. 350, 33 L. ed. 76.

delivering the opinion), in Gutierres v. Albuquerque etc. Co., 188 U. S. 545, 45 L. ed. 588, indicates, however, the position the supreme court is likely to take. The case did not involve the rights of riparian proprietors but only the right of a State or Territory to legislate upon the use of waters on the public domain at all. The decision of the supreme court was to the effect that legislation concerning waters was a perfectly valid field for the exercise of the territorial power of legislation so long as it did not go beyond the constitutional limitations, and quoted the passage from United States v. Rio Grande Irr. Co., which we have already given in a preceding note as to what those limitations are. The decision did not involve the rights of riparian proprietors, but was devoted to upholding territorial legislation of New Mexico, which gave corporations the right to divert surplus waters upon the public domain without interfering with existing rights. Counsel for appellant, however, had, in their brief, brought up the question of the relation of appropriators to the State or to the United States, quoting Lux v. Haggin, and in this connection the following passage may be of importance. The court said:

"The contentions urged upon our notice substantially resolve themselves into two general propositions: First, that the territorial act was invalid, because it assumed to dispose of property of the United States without its consent; and, second, that said statute, in so far, at least, as it authorized the formation of corporations of the character of the complainant, was inconsistent with the legislation of Congress and therefore void. These propositions naturally admit of consideration together.

"The argument in support of the first proposition proceeds upon the hypothesis that the waters affected by the statute are public waters, the property, not of the

Territory or of private individuals, but of the United States; that by the statute private individuals, or corporations, for their mere pecuniary profit, are permitted to acquire the unappropriated portion of such public waters, in violation of the right of the United States to control and dispose of its own property wheresoever situated. Assuming that the appellants are entitled to urge the objection referred to, we think, in view of the legislation of Congress on the subject of the appropriation of water on the public domain, particularly referred to in the opinion of this court in United States v. Rio Grande Dam and Irr. Co., 174 U. S. 704-706, 43 L. ed. 1142, 1143, 19 Sup. Ct. Rep. 770, the objection is devoid of merit. As stated in the opinion just referred to, by the act of July 26, 1866 (14 Stats. at L. 253, c. 262, sec. 9; Rev. Stats. 2339; U. S. Comp. Stats. 1901, p. 1437), Congress recognized, as respects the public domain, 'so far as the United States are concerned, the validity of the local customs, laws, and decisions of courts in respect to the appropriation of water.' "

§ 27. **Summary.**—The Western States are divided into two classes, one deriving the rights of the appropriator as a grant from the United States and recognizing the common law of riparian rights side by side with the law of appropriation, the other deriving the rights of the appropriator from the State and recognizing no law of waters but that of appropriation. The former, the California system, is in force in California, Oregon, Washington, Montana, North Dakota, South Dakota, Nebraska, Texas and Kansas. (*Ante,* sec. 18.) The latter, the Colorado doctrine, is in force in Colorado, Arizona, Idaho, New Mexico, Nevada, Utah, and Wyoming. (*Ante,* sec. 19.) The doctrine of the latter States, if rested solely on the principle that no other rule is ap-

plicable, is open to constitutional objections urged against it by the former States. If rested instead on a broad construction of the early Federal statutes, it is merely a matter of local statutory construction of an indefinite statute concerning local customs, laws, and decisions. These Federal statutes, consequently, are not undeserving of the strictures passed upon them by the Nevada court, above quoted, since they have left room for such fundamentally different constructions. "Had the government of the United States taken as much pains in disposing of the waters of the public domain in as uniform and systematic a manner as it did of the public lands in the arid region, over which those waters run, and the greater portion of which lands are absolutely worthless without the application of the water, the laws regarding water rights would not be in their present unsettled and unharmonious condition."[40]

Aside from this difference in the present derivation of the rights of the appropriator, and in the consequent attitude toward riparian rights, the substantive law of appropriation itself is the same under both systems. Its characteristics, extent of right, loss of right, etc., are founded upon the early California decisions; California being the spring from which this peculiar feature of Western law has come. The decisions of that court seldom fail to be quoted in the other Western States in this connection, and the early ones especially have everywhere a persuasive force that closely approaches authority. The substantive law of appropriation is largely the same under both systems, though in some States—chiefly, the arid States—recent statutory codes of administrative law have been added that are lacking in the rest. (*Ante*, sec. 20.)

[40] Kinney on Irrigation, sec. 272. See, also, Long on Irrigation, sec. 24.

B. RELATION TO OTHER APPROPRIATORS.

§ 28. **Priority Governs.**—Several appropriators on the same stream bear to each other the relation of successive grantees of parcels of one original holding, namely, of the sole right to the waters held by the United States as original owner. Like successive grants between private parties, where they conflict, the later one can hold only what was left after the earlier one was made. The maxim, "*Qui prior est in tempore, portior est in jure,*" is continually quoted in the early cases upon this subject as governing; and this is firmly settled as the fundamental principle of the law of appropriation.[41]

§ 29. **Successive Appropriations.**—It is equally well settled that, subject to the rule of priority, later comers may make appropriations, each later comer in succession being required to respect the appropriations of all who came before him. Later appropriations may be made of the surplus over what has been appropriated by prior appropriators, or of any use that does not materially interfere with prior appropriators.[42] Among

41 Irwin v. Phillips, 5 Cal. 140, 63 Am. Dec. 113; Conger v. Weaver, 6 Cal. 548, 65 Am. Dec. 528; Tenney v. Miners' Ditch Co., 7 Cal. 335; Thompson v. Lee, 8 Cal. 275; Marius v. Bicknell, 10 Cal. 217; Kimball v. Gearhart, 12 Cal. 27; Ortmon v. Dixon, 13 Cal. 33; McDonald v. Bear River Co., 13 Cal. 220; Esmond v. Chew, 15 Cal. 137; Kidd v. Laird, 15 Cal. 161, 76 Am. Dec. 472; Logan v. Driscoll, 19 Cal. 623, 81 Am. Dec. 90; McKinney v. Smith, 21 Cal. 374; Phoenix Water Co. v. Fletcher, 23 Cal. 481; Lobdell v. Simpson, 2 Nev. 274, 90 Am. Dec. 537. See, also, Rev. Stats., sec. 2339; Pomeroy on Riparian Rights, sec. 15; Union etc. Co. v. Dangberg, 81 Fed. 73, citing cases.

42 Cases cited above; also Nevada Water Co. v. Powell, 34 Cal. 109, 91 Am. Dec. 685; Higgins v. Barker, 42 Cal. 233; Junkans v. Bergin, 67 Cal. 267, 7 Pac. 684; Edgar v. Stevenson, 70 Cal. 286, 11 Pac. 704; Barrows v. Fox, 98 Cal. 63, 31 Pac. 811; Natoma etc. Co. v. Hancock, 101 Cal. 42, 31 Pac. 112, 35 Pac. 334; Santa Paula Water Co. v. Peralta, 113 Cal. 38, 45 Pac. 168; Senior v. Anderson, 115 Cal. 496, 47

the successive appropriators each is in the position of a prior one toward all who are subsequent to himself.[43] "A person locating upon a stream and appropriating the water has a right to have it flow (so far as the natural channel is concerned) in precisely the same manner as it did when he located; and no prior locator has any right to make any such change in the natural channel as will injure subsequent appropriators of the same water."[44]

"Priority of appropriation, where no other title exists, undoubtedly gives the better right. And the rights of all subsequent appropriators are subject to his who is first in time. But as others coming on the stream subsequently may appropriate and acquire a right to the surplus or residuum, so the rights of each successive person appropriating water from a stream are subordinate to all those previously acquired, and the rights of each are to be determined by the condition of things at the time he makes his appropriation. So far is this rule carried, that those who are prior to him can in no way change or extend their use to his prejudice, but are limited to the rights enjoyed by them when he secured his.[45] Nor has anyone the right to do anything which will, in the natural or probable course of things, curtail or interfere with the prior acquired rights of those either above or below him on the same stream.

"The subsequent appropriator only acquired what has not been secured by those prior to him in time. But what he does thus secure is as absolute and perfect and free from any right of others to interfere with it as the

Pac. 454; Smith v. Hawkins, 120 Cal. 86, 52 Pac. 139; Senior v. Anderson, 130 Cal. 290, 62 Pac. 563.

43 Pomeroy on Riparian Rights, sec. 83; Kinney on Irrigation, sec. 173 et seq.

44 Lobdell v. Simpson, 2 Nev. 274, 90 Am. Dec. 537.

45 Cf. *infra.*, sec. 145.

rights of those before him are secure from interference by him."[46]

§ 30. **Periodical Appropriations.**—The later appropriation in most of the cases is a claim to the surplus in amount of water. It may just as well, however, be an appropriation of the surplus in time, to use the whole or part when the prior claimant is not using it at certain times. In Smith v. O'Hara (the leading case),[47] the court says:

"If the person who first appropriates the waters of a stream only appropriates a part, another person may appropriate a part or the whole of the residue; and when appropriated by him his right thereto is as perfect, and entitled to the same protection, as that of the first appropriator to the portion appropriated by him. In Ortman v. Dixon, 13 Cal. 34, it was decreed that the defendants were entitled to the waters of the creek for the use of their mill; that the plaintiffs were then entitled to sufficient water to fill their ditch No. 2; and that the defendants were next entitled to the residue to fill their ditch No. 3. The cases are very numerous which affirm, or assume without question, this doctrine. It is usually the case that the amount of water to which the several persons claiming its use are entitled, is measured by inches, according to miner's measurement, or by the capacity of the ditches through which it is conducted from the stream, but there is no reason why the amount may not be measured in some other mode. They hold the amount appropriated by them respectively as they would do had the paramount proprietor granted to

46 Proctor v. Jennings, 6 Nev. 83, 3 Am. Rep. 240. Held, a subsequent appropriator's dam is not actionable if it interferes with prior's water-wheel above only because of heavy and fortuitous rains.

47 43 Cal. 371, at 375.

each the amount by him appropriated. The right to use the waters, or a certain portion of them, might be granted to one person for certain months, days or parts of days, and to other persons for other specified times. An agriculturist might appropriate the waters of a stream for irrigation during the dry season, and a miner might appropriate them for his purposes during the remainder of the year. And so may several persons appropriate the waters for use during any different periods. There is no difference in principle between appropriations of waters, measured by time, and those measured by volume."[48]

§ 31. **Temporary Appropriation.**—A later comer may make an appropriation, temporary in its nature, in the following cases: (a) Where the prior appropriator has posted his notice and begun construction work, but has not yet completed his flumes or other appliances by which the water is to be diverted. During this interval, which may last for a year or more in some cases, others have a right to use the water. Their right is entirely a temporary one, however, and ceases when the works of the prior claimant are completed.[49] This temporary use becomes wrongful if it hinders the prior claimant's construction work, or prevents his diversion of the water when his works are finished.[50] Likewise it must leave him sufficient water during the construction work to keep his new ditch in good condition, or

48 To the same effect, Peregoy v. Sellick, 79 Cal. 568, 21 Pac. 966; Santa Paula Water Co. v. Peralta, 113 Cal. 38, 45 Pac. 168; Barnes v. Sabron, 10 Nev. 217 (quoting Smith v. O'Hara); Farnham on Waters, p. 2088; City of Telluride v. Blair (Colo.), 80 Pac. 1053; Pomeroy on Riparian Rights, sec. 84; Southside etc. Co. v. Burson, L. A. No. 1383, Aug. 1, 1905, Sup. Ct. Cal., 30 Cal. Dec. 111.

49 Nevada etc. Co. v. Kidd, 37 Cal. 282.

50 Ibid.

the water otherwise needed to carry on his construction work.[51] The prior claimant need take no notice of temporary appropriations of this kind during the progress of his construction work; they cease *ipso facto* when he is ready, though he has not warned them.[52] (b) Where, because of stoppage later, the prior appropriator who has been using the water ceases temporarily to do so. During such time, a later comer may divert the water and use it. While a ditch by which the waters of a stream have been appropriated is out of repair, and not in a condition to carry any water, an action will not lie to abate, as a nuisance, a reservoir constructed across the bed of the stream, above the head of the ditch, by which the water of the stream is collected and detained and caused to overflow unequally.[53]

It will thus be seen that a fundamental object of the law of appropriation is to have the water put to a beneficial use; conversely, to have none wasted.

§ 32. **No Partiality.**—Appropriators following all pursuits are, as we have seen,[54] all on an equal footing. As is said in Basey v. Gallagher:[55] "Water is diverted to propel machinery in flourmills and sawmills, and to irrigate land for cultivation as well as to enable miners to work their mining claims, and in all such cases the right of the first appropriator, exercised within reasonable limits, is respected and enforced."[56] Whether the prior appropriator is himself a miner or not makes no

51 Ibid; and Weaver v. Conger, 10 Cal. 233.

52 Ibid; and Woolman v. Garringer, 1 Mont. 535.

53 Bear River etc. Co. v. Boles, 24 Cal. 359.

54 *Ante*, sec. 9.

55 87 U. S. 670, 22 L. ed. 452.

56 Accord Union etc. Co. v. Dangberg, 81 Fed. 73, quoted *ante*, sec. 22.

difference.[57] To the cases cited *ante*[58] we may add a quotation from another. Says the court in Wixon v. Bear River etc. Co.:[59] "The four remaining instructions refused by the court are founded upon the theory that in the mineral districts of this State, the right of miners and persons owning ditches constructed for mining purposes are paramount to all other rights and interests of a different character regardless of the time or mode of their acquisition; thus annihilating the doctrine of priority in all cases where the contest is between a miner or ditch owner and one who claims the exercise of any other kind of right or ownership of any other kind of interest. To such a doctrine we are unable to subscribe, nor do we think it clothed with a plausibility sufficient to justify us in combating it." And so, while a miner, prior to a sawmill, was protected in Conger v. Weaver;[60] on the other hand, the sawmill being prior was protected in Tartar v. Spring Creek etc. Co.,[61] and Ortman v. Dixon.[62]

In the irrigation codes of the arid States, however, this rule of impartiality is sometimes departed from. These codes sometimes provide that in times of scarcity appropriations for domestic uses shall be supplied first; for irrigation second; then all other uses last.[63] Such a preference of domestic uses exists also under the common law of riparian rights.

57 Natoma etc. Co. v. Hancock, 101 Cal. 42, 31 Pac. 112, 35 Pac. 334.

58 Sec. 9.

59 24 Cal. 367, at 373, 85 Am. Dec. 69.

60 6 Cal. 548, 65 Am. Dec. 528.

61 5 Cal. 395.

62 13 Cal. 33.

63 See *infra*, sec. 144.

C. RELATION TO RIPARIAN PROPRIETORS.

§ 33. **To Subsequent Settlers.**—The United States having granted the right to use the water to appropriators, later settlers take subject thereto, as in any case of successive grants from a common grantor. A grant of land from the United States remains subject to prior appropriations of water or prior rights to ditches, as to all other prior possessory rights.[64] In the first case cited in the note, the later grant was by patent to railway lands; in the last, to mining ground. In De Necochea v. Curtis, it was of a homestead. No matter what the character of the later grant, it cannot be devested of prior rights of appropriation of water or rights to ditches.[65]

In Van Sickle v. Haines,[66] the Nevada court had adopted the contrary view before the Federal act of 1870,[67] but after the statute the rule was settled as above in Nevada as elsewhere.[68]

64 Rev. Stats., U. S., secs. 2339, 2340; Broder v. Natoma Water Co., 101 U. S. 274, 25 L. ed. 790; S. C., 50 Cal. 621; Irwin v. Phillips, 5 Cal. 140, 63 Am. Dec. 113; Himes v. Johnson, 61 Cal. 259; South Yuba Water Co. v. Rosa, 80 Cal. 333, 22 Pac. 222; De Necochea v. Curtis, 80 Cal. 397, 20 Pac. 563, 22 Pac. 198; Burrows v. Burrows, 82 Cal. 564, 23 Pac. 146; Ramelli v. Irish, 96 Cal. 214, 31 Pac. 41; Taylor v. Abbott, 103 Cal. 421, 37 Pac. 408; Faulkner v. Rondoni, 104 Cal. 140, 37 Pac. 883; McGuire v. Brown, 106 Cal. 660, 39 Pac. 1060, 30 L. R. A. 384; Jacob v. Day, 111 Cal. 571, 44 Pac. 243; Senior v. Anderson, 115 Cal. 496, 47 Pac. 454; Williams v. Harter, 121 Cal. 47, 53 Pac. 405; Tuolumne etc. Co. v. Maier, 134 Cal. 583, 66 Pac. 863.

65 In general accord, Tynon v. Despain, 22 Colo. 240, 43 Pac. 1039; Pomeroy on Riparian Rights, sec. 25 et seq. See *infra*, chapter VIII.

66 7 Nev. 249.

67 Rev. Stats., sec. 2340.

68 Barnes v. Sabron, 10 Nev. 217; Shoemaker v. Hatch, 13 Nev. 261; Hobart v. Wicks, 15 Nev. 418; Jones v. Adams, 19 Nev. 78, 3 Am. St. Rep. 788, 6 Pac. 442.

So far as the later grant of land carries riparian rights at all,[69] those rights exist only in the surplus over all prior appropriations.[70]

§ 34. To Prior Settlers.—Under the California doctrine, riparian rights attach to the land of prior settlers, which appropriations thereafter must not disturb. Returning again to the simple rule of successive grants, the relations between the prior settler and the subse-

[69] *Infra*, sec. 34.

[70] DEPARTMENT OF THE INTERIOR.

General Land Office,

Washington, D. C., March 21, 1872.

Hon. A. A. Sargent, M. C., Washington, D. C.

Sir: I have the honor to acknowledge the receipt to-day, by reference from you, of a letter bearing date of the twelfth instant, from George E. Williams, Esq., of Placerville, California, recommending an excepting clause to be inserted in patents issued for lands in the mineral regions, for the protection of rights for the use of water ditches, etc., in which you concur.

In response, I would state that this question came before me for consideration several weeks since, and although from an examination of the ninth section of the mining act of July 26th, 1866, and the seventeenth section of the amendatory act of July 9, 1870, I am satisfied that rights to the use of water for mining, manufacturing, agricultural or other purposes, and rights for the construction of ditches and canals, used in connection with such water rights, are fully protected by law; yet, in order that all misapprehension that might exist between the holder or claimant of such right and such patentee might be set at rest, it was determined in all patents hereafter granted in mineral regions of the United States, to insert an additional clause or condition, expressly protecting and reserving such water rights, and making the patent subject thereto, the same as before it was granted.

The blank forms for this patent are now being printed, and will be ready for use in a day or two, pending the receipt of which, the granting of patents in the mineral region for agricultural lands will be temporarily suspended.

I am, sir, very respectfully,

Your obedient servant,

WILLIS DRUMMOND,

Commissioner.

quent appropriator is that of successive grantees of portions of the same thing, and the later grant can cover only what was left after the earlier one was made. This is the distinctive feature of what[71] is called the California doctrine. In the States following the Colorado doctrine[72] riparian rights can never be acquired by anyone[73] rejecting the California doctrine.

In California, prior settlers on riparian land, whether homesteads, pre-emptions, railway grants or whatever the nature of their holding, have the rights of riparian owners, which later appropriators cannot take away though they go on other and vacant public land to do it. This was the important principle laid down in the leading case of Lux v. Haggin,[74] affirming Crandall v. Woods,[75] and affirmed in a long list of cases.[76]

The surplus over the prior grant to either will be recognized as a valid subject of grant to the other. The surplus in amount of water or in time of use over what has been acquired by prior appropriation will attach to the later grants of the land and the grantees will have riparian rights in the surplus; and *vice versa,* the surplus over vested riparian rights may be taken by later appropria-

71 In Willey v. Decker, 11 Wyo. 496, 100 Am. St. Rep. 939, 73 Pac. 210.

72 *Ante,* sec. 19.

73 *Ante,* sec. 25.

74 69 Cal. 255 (see page 336), 10 Pac. 674.

75 8 Cal. 136.

76 Among them the following: Van Bibber v. Hilton, 84 Cal. 585, 24 Pac. 308, 598; Alta Land Co. v. Hancock, 85 Cal. 219, 20 Am. St. Rep. 217, 24 Pac. 645; Modoc etc. Co. v. Booth, 102 Cal. 151, 36 Pac. 431; McGuire v. Brown, 106 Cal. 660, 39 Pac. 1060, 30 L. R. A. 384; Hargrave v. Cook, 108 Cal. 72, 41 Pac. 18, 30 L. R. A. 390; Baxter v. Gilbert, 125 Cal. 580, 58 Pac. 129, 374; Bathgate v. Irvine, 126 Cal. 135, 77 Am. St. Rep. 158, 58 Pac. 442; Rice v. Meiners, 136 Cal. 292, 68 Pac. 817; Sturr v. Beck, 133 U. S. 541, 10 Sup. Ct. Rep. 350, 33 L. ed. 761; Kinney on Irrigation, sec. 190 et seq. See *supra,* sec. 18.

tors.[77] It is the duty of the riparian proprietor to return the surplus to the stream for use of appropriators below him.[78]

The relation is always that of successive grantees of portions of the right to the same thing, to be determined by priority on one side, and the right to the surplus on the other. The following two passages state the rule in California:

"Both the right to appropriate water on the public lands and that of the occupant of portions of such lands are derived from the implied consent of the owner, and as between the appropriator of land or water the first possessor has the better right. The two rights stand upon an equal footing, and when they conflict they must be decided by the fact of priority. (Irwin v. Phillips, 5 Cal. 140; S. C., 73 Am. Dec. 113.) Since the United States, the owner of the land and water, is presumed to have permitted the appropriation of both the one and the other, as between themselves the prior possessor must prevail."[79]

"One who locates upon public lands with a view of appropriating them to his own use, becomes the absolute owner thereof as against everyone but the government, and is entitled to all the privileges and incidents which appertain to the soil, subject to the single exception of rights antecedently acquired. . . . . The rule,

77 Lux v. Haggin, 69 Cal. 255, 10 Pac. 674; Edgar v. Stevenson, 70 Cal. 286, 11 Pac. 704; Barrows v. Fox, 98 Cal. 63, 32 Pac. 811; Modoc etc. Co. v. Booth, 102 Cal. 151, 36 Pac. 431; Faulkner v. Rondoni, 104 Cal. 140, 37 Pac. 883; Baxter v. Gilbert, 125 Cal. 580, 58 Pac. 129, 374.

78 Stanford v. Felt, 71 Cal. 249, 16 Pac. 900; Gould v. Stafford, 77 Cal. 66, 18 Pac. 879; Silver Creek etc. Co. v. Hayes, 113 Cal. 142, 45 Pac. 191; Bathgate v. Irvine, 126 Cal. 135, 77 Am. St. Rep. 158, 58 Pac. 442.

79 Lux v. Haggin, 69 Cal. 255 at 355, 10 Pac. 674.

'*Qui prior est in tempore, potior est in jure*,' must apply."[80]

§ 35. **Prior Settlers Who Hold the Land in Fee.**—All land that has passed into private ownership in fee simple is fully within this rule, and protected in its riparian rights against subsequent appropriators, though the appropriator goes on vacant public land to make his appropriation.[81] Usually the land passes into private ownership by virtue of a patent under the homestead, pre-emption, or other Federal laws. But the fee may have been acquired by virtue of a Mexican grant, made before the United States acquired sovereignty; and riparian rights fully attach to land whose title is deraigned under a Mexican grant.[82]

§ 36. **Prior Settlers Before Patent.**—It was at first held that, until patent issues for the land, or at least until full payment, riparian rights are not protected against later appropriation.[83] But that was going too far, and it is now settled that it is enough that the first formal step (filing entry or application in the land office) is sufficient.[84] A valid mining location constitutes the lo-

[80] Crandall v. Woods, 8 Cal. 136 at 144.

[81] Lux v. Haggin, 69 Cal. 255, 10 Pac. 674, and cases *supra*.

[82] Lux v. Haggin, 69 Cal. 255, 10 Pac. 674; Pope v. Kinman, 54 Cal. 3; Vernon etc. Co. v. Los Angeles, 106 Cal. 237, 39 Pac. 762; Los Angeles v. Pomeroy, 124 Cal. 597, 57 Pac. 585; Pomeroy on Riparian Rights, sec. 42.

[83] Osgood v. Water Co., 56 Cal. 571; Farley v. Spring Valley etc. Co., 58 Cal. 142.

[84] Sturr v. Beck, 133 U. S. 541, 10 Sup. Ct. Rep. 350, 33 L. ed. 761; Lone Tree etc. Co. v. Cyclone etc. Co., 15 S. Dak. 519, 91 N. W. 352; Cruse v. McCauley, 96 Fed. 369; Conkling v. Pacific etc. Co., 87 Cal. 296, 25 Pac. 399; Shenandoah etc. Co. v. Morgan, 106 Cal. 409, 39 Pac. 802; McGuire v. Brown, 106 Cal. 660, 39 Pac. 1060, 30 L. R. A. 384; Union M. & M. Co. v. Dangberg, 2 Saw. 450, Fed. Cas. No. 14,370; Long on Irrigation, sec. 30.

cator a riparian owner within this rule; and water flowing through a mining location cannot be appropriated later to the injury of the owner of the mining claim's riparian rights.[85]

Mere possession of public land without any steps taken to obtain title would not to-day protect riparian rights. Naked possession of the public lands gives no right against those who peaceably seek to obtain rights under the statutes for that purpose.[86]

§ 37. **Conclusion.**—The following conclusions seem to be warranted from the foregoing, as expressing the California doctrine, at least:

a. An appropriation is equivalent to a grant from the United States (or State) as landowner to use water, and may carry whatever right in the water the United States has to grant, but nothing that the United States was never entitled to or has parted with.

b. The relation between successive appropriators is that of successive grantees from the same owner; they are independent and priority governs, on the one hand; on the other, the right to the surplus, not being included in the prior grant, vests by the later one. Each appropriator is a prior one as against all who are subsequent to him.

c. The relation between appropriators and riparian proprietors is likewise that of successive grantees from a common owner. They are independent and priority governs, on the one hand; on the other, the right to the

85 Crandall v. Woods, 8 Cal. 136; Leigh v. Ditch Co., 8 Cal. 323. See Pomeroy on Riparian Rights, sec. 33 et seq.

86 Lake v. Tolles, 8 Nev. 285, decided before the common law of riparian rights was rejected in Nevada; Lindley on Mines, sec. 216 et seq.; Kinney on Irrigation, sec. 286. See Cal. Pen. Code, sec. 420.

surplus over the amount needed by the prior riparian owner or appropriator, not being included in the prior grant, vests in the later appropriator or riparian owner, as the case may be.

D. CHARACTERISTICS.

§ 38. **The Right is Usufructuary.**—Speaking of "qualified property" as opposed to an absolute right of property, Blackstone says:[87] "Many other things may also be the objects of qualified property. It may subsist in the very elements of fire or light, of air, and of water. A man can have no absolute permanent property in these, as he may in the earth and land; since these are of a vague and fugitive nature, and therefore can admit only of a precarious and qualified ownership, which lasts so long as they are in actual use and occupation, but no longer. If a man disturbs another, and deprives him of the lawful enjoyment of these; if one obstructs another's ancient windows, corrupts the air of his house or gardens, fouls his water, or unopens and lets it out, or if he diverts an ancient watercourse that used to run to the other's mill or meadow; the law will animadvert hereon as an injury, and protect the party injured in his possession. But the property in them ceases the instant they are out of possession; for, when no man is engaged in their actual occupation, they become again common, and every man has equal right to appropriate[88] them to his own use."

87 Book II, chapter XXV, p. 395.

88 This quotation is given as an explanation of what is meant by a usufructuary right, that feature being common to both the systems of appropriation and riparian rights. The passage quoted and others in Blackstone were at one time further thought to countenance the law of appropriation in England; but that has long since been repudiated. See Mason v. Hill, 5 Barn. & Adol. 1, and the note in 43 Am. Dec. 269. See, also, Farnham on Waters, p. 1568. See *infra*, sec. 207.

The right resulting from the grant to an appropriator, from the United States, is likewise only usufructuary,[89] though for shortness' sake, the appropriator is spoken of as the owner.[90] There is no property in the water itself nor in the channel itself; the right is only to a use and flow.

§ 39. No Property in the "Corpus" of the Water.—Property in the *corpus* of the waters is not recognized, so long as flowing naturally,[91] and hence, the appropriator cannot sue for the value of water at so much per inch or gallon diverted from the stream to his detriment; he must declare for the damage to his enterprise from loss of the use and flow.[92] Likewise a sale of the water right does not mean the delivery of any specific quantity of water.[93] Nor can one set up a claim to water after it has been allowed to run off.[94] When, however, the water has once been severed from its natural watercourse, so long as it is in an artificial conduit or watercourse, such as flumes or ditches, it does become the subject of ownership, and, like coal after being mined, is personal property.[95]

89 Hill v. Newman, 5 Cal. 445, 63 Am. Dec. 140; Nevada etc. Co. v. Kidd, 37 Cal. 282, and cases *infra*.

90 Riverside etc. Co. v. Gage, 89 Cal. 410, 26 Pac. 889.

91 *Inter alia*, Kidd v. Laird, 15 Cal. 161, 76 Am. Dec. 472; McDonald v. Askew, 29 Cal. 200; Los Angeles v. Baldwin, 53 Cal. 469; McGuire v. Brown, 106 Cal. 660, 39 Pac. 1060, 30 L. R. A. 384; McKeany v. Black, 117 Cal. 587, 49 Pac. 710; Pomeroy on Riparian Rights, sec. 55.

92 Parks etc. v. Hoyt, 57 Cal. 44; Riverside etc. Co. v. Gage, 89 Cal. 410, 418, 26 Pac. 889.

93 Booth v. Chapman, 59 Cal. 149.

94 Eddy v. Simpson, 3 Cal. 249, 58 Am. Dec. 408; *infra*, sec. 191.

95 *Infra*, sec. 131.

§ 40. **No Property in the Channel.**—Property in the channel does not pass to the appropriator, but remains in the United States unless granted as land to others under the homestead or other laws. And consequently, the same channel may be used by several appropriators, as where one man had appropriated water and a later comer above stream added a large volume of water to the channel, and then diverted it again before it reached the former appropriator, thus using the channel as a link in a long ditch line.[96] If the appropriator happens also to own the channel by some other source of title, he may sell it without affecting the water right and *vice versa*.[97]

§ 41. **The Right is Exclusive.**—As opposed to the correlative rights of the common law, whereby all on the stream have an equal right, under the law of appropriation the rights of the claimants are unequal. Each has an exclusive right to the extent of his prior appropriation, and appropriations vary greatly in the extent of right appropriated. Full protection is given to the prior appropriator against all comers.[98]

This exclusiveness includes a right to the natural flow of the whole stream up to its source, and with its tributaries.[99] The doctrine of appropriation, however, is founded on the right to disturb the natural order of things. Later changes by others above do not concern the appropriator if the flow at his point of diversion is not disturbed by them. An artificial flow can be substituted, it would seem, if it can be done without dam-

96 Hoffman v. Stone, 7 Cal. 46; Butte Co. v. Vaughn, 11 Cal. 143, 70 Am. Dec. 769.

97 Doyle v. San Diego Co., 46 Fed. 709.

98 *Infra*, chapter IX, and *ante*, sec. 28 et seq.

99 Long on Irrigation, sec. 60, cases concerning tributaries collected.

age.[100] Likewise the surplus may, as we have seen, be diverted by others. There is no right in the natural flow such as would allow the ditching back of a stream that had shifted its course naturally;[101] nor, if a stream becomes filled with mud and silt, can the appropriator raise his dam higher so as to preserve the natural depth there, if in so doing the rights of others are interfered with, though later in time.[102]

The right is exclusive of use by others such as interferes with the use for which appropriated; but it does not include any property in the water itself, nor in the channel itself.[103]

§ 42. **Independent of Ownership or Possession of Land.**—The water may be taken from and over and be used on distant lands owned entirely by the government or by other private parties, as was frequently the case with canal companies. This is a distinguishing feature of the law of appropriation. The original case of Irwin v. Phillips[104] was such a case. Title to land is in no way concerned.[105] This is now accepted without comment in California. We may also quote the following from Smith v. Denniff:[106] "The legal title to the land upon which a water right acquired by appropriation made on

100 Wiggins v. Muscupiabe etc. Co., 113 Cal. 182, 186, 54 Am. St. Rep. 337, 45 Pac. 160, 32 L. R. A. 667.

101 Paige v. Rocky etc. Co., 83 Cal. 84, 21 Pac. 1102, 23 Pac. 875; Wholly v. Cladwell, 108 Cal. 95, 49 Am. St. Rep. 64, 41 Pac. 31, 30 L. R. A. 820.

102 Nevada etc. Co. v. Powell, 34 Cal. 109, 91 Am. Dec. 685. See in general, Pomeroy on Riparian Rights, sec. 60.

103 Cf., sec. 29, *ante*.

104 5 Cal. 140, 63 Am. Dec. 113.

105 Santa Paula etc. Works v. Peralta, 113 Cal. 38, 45 Pac. 168; quoted *infra*, sec. 48.

106 24 Mont. 20, 81 Am. St. Rep. 408, 60 Pac. 398, 50 L. R. A. 741.

the public domain is used or intended to be used, in no way affects the appropriator's title to the water right." The fact, however, that an appropriator of water for irrigation owns no land to be irrigated, may be given in evidence to show that he was not acting *bona fide*.[107]

The rule under riparian rights is exactly the opposite. This is one of the most striking characteristics of the law of appropriation, conforming to the necessities of mining in the early days in California. But to-day it is sometimes thought unfortunate in its application to irrigation; and on this account this prime characteristic of the law of appropriation has been departed from by statute in Arizona,[108] Nebraska,[109] Nevada,[110] Utah,[111] and in the recent irrigation codes of Oklahoma (sec. 30), and South Dakota (secs. 31, 47. See Appendix). The appropriation must in those States and Territories become fixed to some land, and is either inseparable from that land or else separable with difficulty. If water is furnished by a canal company, the consumer is the appropriator and the canal company only agent. Once attached to the land, moreover, the water right cannot in these States and Territories be thereafter sold separately, except with the approval of the State Engineer and publication of notice.[112]

107 See *infra*, sec. 109; Mills v. Butte etc. Co. (Mont.), 79 Pac. 549. In accord with the general principles of this section, Hayes v. Buzard (Mont.), 77 Pac. 423; Johnson v. Little etc. Co. (Wyo.), 79 Pac. 22; Willey v. Decker, 11 Wyo. 496, 100 Am. St. Rep. 939, 73 Pac. 210; Nevada etc. Co. v. Bennett, 30 Or. 59, 60 Am. St. Rep. 777, 45 Pac. 472, and the cases collected in Pomeroy on Riparian Rights, secs. 46, 92; Kinney on Irrigation, sec. 156; Gould on Waters, sec. 230; 17 Am. & Eng. Ency. of Law, 497.

108 Gould v. Maricopa etc. Co. (Ariz.), 76 Pac. 598; Slosser v. Salt River Co. (Ariz.), 65 Pac. 332.

109 Farmers' Irr. Dist. v. Frank (Neb.), 100 N. W. 286.

110 Stats. 1905, p. 66.

111 Stats. 1905, c. 108, sec. 60.

112 Ibid. See Appendix B.

This view has been urged also in other States as a necessary change in the law of appropriation when applied to irrigation, but has been usually rejected. It is rejected in California.[113] The National Irrigation Congress in its Ninth Session held at Chicago, Illinois, November 21-24, 1900, adopted a memorial declaring among other things that the right to the use of water for irrigation should inhere in the land irrigated. Is this an attempt at a compromise between appropriation and riparian rights? A characteristic of the common law of riparian rights is that the right to use the water is attached to certain lands; a characteristic feature of appropriation is that the appropriation is independent of title to or possession of any lands.

§ 43. **Distinguished from Right to a Ditch.**—The water right is entirely distinct from the right to the ditch in which the water is conveyed. The latter is an easement. The former is an incorporeal hereditament *sui generis,* and not an easement. The water right and ditch right may be conveyed separately, or the one may exist without the other. An abandonment of one does not necessarily include abandonment of the other. One may, however, be appurtenant to the other. The matter is discussed and cases cited at length later.[114]

§ 44. **It is Real Estate.**—In Hill v. Newman,[115] the court says: "From the policy of our laws it has been held in this State to exist without private ownership of

113 Cases cited *supra,* and cases collected in 65 L. R. A. 407, note.

114 See in general, Nevada etc. Co. v. Kidd, 37 Cal. 282, 309; Zimmler v. San Luis etc. Co., 57 Cal. 221; McLean v. Hapgood, 85 Cal. 555, 24 Pac. 788; Mayberry v. Alhambra etc. Co., 125 Cal. 444, 54 Pac. 530, 58 Pac. 68; Pomeroy on Riparian Rights, sec. 57. See *infra,* sec. 129 et seq.

115 5 Cal. 445, 63 Am. Dec. 140.

the soil, upon the ground of prior location upon the land, or prior appropriation and use of the water. The right to water must be treated in this State as it has always been treated, ... as a corporeal privilege bestowed upon the occupier or appurtenant to the soil; and as such has none of the characteristics of mere personalty." The court held that a justice of the peace has no jurisdiction over an action for diversion of water because it was an action concerning title to real estate.[116] The statute of frauds, concerning conveyances of real estate, applies to it;[117] the statute of limitations concerning land applied to it.[118] So do the recording statutes, as between successive conveyances.[119] That it is in the nature of real estate is fully recognized.[120]

§ 45. **It is Conditional.**—This is a feature in common with all possessory rights on the public domain. In the early days the possessor disclaimed any right in the public land itself; he insisted only on the right to go upon it and carry on his enterprises there. The license or permission given by the tacit consent of the United States was the thing emphasized; a license personal in its nature. And while possessory rights have acquired the dignity of real estate to-day, they retain also the

116 A somewhat similar decision appears in Pacific etc. Club v. Sausalito etc. Co., 98 Cal. 487, 33 Pac. 322.

117 Griseza v. Terwilliger, 144 Cal. 456, 77 Pac. 1034; Smith v. O'Hara, 43 Cal. 371; Oneto v. Restano, 78 Cal. 374, 20 Pac. 743; Dorris v. Sullivan, 90 Cal. 279, 27 Pac. 216; Hayes v. Fine, 91 Cal. 391, 27 Pac. 772.

118 Yankee Jim etc. Co. v. Crary, 25 Cal. 504, 85 Am. Dec. 145, and see *infra*, sec. 194 et seq.

119 Partridge v. McKinney, 10 Cal. 181; Lyles v. Perrin, 119 Cal. 264, 51 Pac. 332.

120 See, also, Fudickar v. Irrigation Dist., 109 Cal. 29, 41 Pac. 1024; Santa Paula etc. Co. v. Peralta, 113 Cal. 38, 45 Pac. 168; South Tule etc. Co. v. King, 144 Cal. 450, 454, 77 Pac. 1032; Talcott v. Mastin (Colo.), 79 Pac. 973.

impress of their origin. A water right of appropriation is spoken of as a privilege, license or franchise.[121] This franchise is conditioned on beneficial use of the water; a failure of this condition causes a loss of the right.[122]

§ 46. **It is an Incorporeal Hereditament.**—It is not land.[123] It is not subordinate to any land, but independent thereof and of equal dignity therewith, and hence not an easement.[124] Often it is called an easement;[125] but it is submitted that such is not the better view.[126]

In Hill v. Newman,[127] quoted in a preceding section, it is called a corporeal hereditament but this is criticised by Yale.[128] It was held to be incorporeal in Swift v. Goodrich,[129] deciding consequently that contracts concerning water rights cannot create the relation of landlord and tenant, as, being incorporeal, no tenancy can exist therein.

§ 47. **Definition.**—From these characteristics, the following definition, it is suggested, may be deduced:

A water right of appropriation is an interest in real estate independent of the ditch for carrying the water,

121 E. g., Conger v. Weaver, 6 Cal. 548, 558; Mitchell v. Amador Canal etc. Co., 75 Cal. 464, 483, 17 Pac. 246; Natoma etc. Water Co. v. Hancock, 101 Cal. 42, 31 Pac. 112, 35 Pac. 334.

122 *Infra*, sec. 123; and chapter XII.

123 Mt. Carmel Fruit Co. v. Webster, 140 Cal. 183, 73 Pac. 826.

124 Yale on Mining Claims and Water Rights, 204, 215; and cases cited *infra*.

125 E. g., Smith v. Hawkins, 110 Cal. 122, 42 Pac. 453; Smith v. Deniff, 24 Mont. 20, 81 Am. St. Rep. 408, 60 Pac. 398, 50 L. R. A. 741.

126 See, also, Lux v. Haggin, 69 Cal. 255, 293, 10 Pac. 674.

127 5 Cal. 445, 63 Am. Dec. 140.

128 Pages 204, 215.

129 70 Cal. 103, 11 Pac. 561.

and independent of ownership or possession of any land, whereby the appropriator is granted by the government the exclusive use of the water anywhere so long as he applies it to a beneficial purpose; and it is an incorporeal hereditament, solely usufructuary, not conferring ownership in the corpus of the water or in the channel of the stream.

CHAPTER III.

WHO CAN APPROPRIATE.

§ 48. Persons in general.
§ 49. Tenants in common.
§ 50. Riparian owners.
§ 51. Corporations.

§ 48. **Persons in General.**—There is no restriction respecting the persons who can appropriate.

"The silent acquiescence with which the government, prior to the act of Congress of July 26, 1866, regarded the appropriation of water on its lands, as well as the express recognition extended by that statute to rights so acquired, did not discriminate between Trojan and Tyrian—citizens or aliens; married women and minors were, in general, not competent to pre-empt land, but we have never heard that they might not make a valid appropriation of water; the tests of such appropriation were priority of possession and beneficial use (Maeris v. Bicknell, 7 Cal. 261, 68 Am. Dec. 257; Davis v. Gale, 32 Cal. 26, 91 Am. Dec. 554; De Necochea v. Curtis, 80 Cal. 397); and title, or the right to acquire title, in the place of intended use has never been a necessary element in the ownership of appropriated water. Besides, since the prior appropriation of water is a mode of acquiring a right in real property by purchase (Hill v. Newman, 5 Cal. 445, 63 Am. Dec. 140)—the alienage of the defendant was a matter between him and the government, and, if it were admitted that as against the government, he could have no valid right in the water, yet until 'office found,' it is conceived that private individuals were not at liberty to treat his appropriation as void of effect, or

the water itself as still open to another to take. (Norris v. Hoyt, 18 Cal. 217; Racouillat v. Sansevain, 32 Cal. 376; Lobdell v. Hall, 3 Nev. 516.)" In the case from which this is quoted[1] an appropriation by an alien was held good.[2]

A lessee of land may be an appropriator of water for irrigating that land.[3]

§ 49. **Tenants in Common.**—Where several join in making an appropriation they will usually be tenants in common of the water right.[4] There is this peculiarity arising out of such a tenure, that the water right is held not to be in its nature subject to actual partition; and on a partition suit the only separation of the interests of the tenants in common that can be made is by ordering a sale and a division of the proceeds.[5]

§ 50. **Riparian Owners.**—Before the common-law rights of riparian proprietors were established under the California doctrine, cases involving riparian owners were frequently rested on actual appropriations made by them; there was no attempt made to restrict their right to be appropriators.[6] And in States where riparian rights are not recognized, the only way a riparian owner

1 Santa Paula Water Works v. Peralta, 113 Cal. 38, 43, 45 Pac. 168.

2 Accord Lobdell v. Hall, 3 Nev. 507, upholding an appropriation by an Indian. In general accord, Long on Irrigation, sec. 35; Kinney on Irrigation, secs. 154, 155.

3 Sayre v. Johnson (Mont.), 81 Pac. 389.

4 Abel v. Love, 17 Cal. 233; Bradley v. Harkness, 26 Cal. 69; Lytle Creek etc. Co. v. Perdew, 65 Cal. 447, 4 Pac. 426; Frey v. Lowden, 70 Cal. 550, 11 Pac. 838; and see Civ. Code, Cal., sec. 842.

5 McGillivray v. Evans, 27 Cal. 92; Lorenz v. Jacobs, 59 Cal. 262. See, also, *infra*, sec. 165. Accord Long on Irrigation, sec. 75.

6 E. g., Anaheim etc. Co. v. Semi-Tropic etc. Co., 64 Cal. 185, 30 Pac. 623; Wilcox v. Hausch, 64 Cal. 641, 3 Pac. 108.

can get a water supply is by an appropriation.[7] But when riparitn rights reappeared in the front in California, the question arose whether the owner of those rights was excluded from getting additional rights by appropriation on the same or on a different stream.

Trouble has arisen over another question; that is, whether an appropriation can be made on the riparian land itself—a different question, which must be distinguished from this, and will be considered later.[8] Being made on other and public land it is settled in California that there is nothing in the character of a riparian owner that excludes him from making an appropriation on public land, like anyone else. The two rights may exist together, and are not necessarily inconsistent, and need not merge. This was firmly laid down in Healy v. Woodruff, 97 Cal. 464, 32 Pac. 528, and approved (on this point) in Cave v. Tyler, 133 Cal. 566, 65 Pac. 1089. In Healy v. Woodruff, the riparian proprietor appropriated extra water from the same stream on public land.[9] In Smith v. Hawkins[10] the court reached the same result where the appropriator bought up additional riparian rights.[11] In Van Bibber v. Hilton, 84 Cal. 585, 24 Pac. 308, 598, all the parties to the action were riparian proprietors and the defendants were also appropriators. The trial court limited the right of the latter to the amount claimed as appropriators. Judgment was reversed by the supreme court for not also making some allowance as riparian right.

The decision in Senior v. Anderson[12] is a necessary

7 E. g., Jerrett v. Mahan, 20 Nev. 89, 17 Pac. 12. See Farnham on Waters, sec. 60.

8 Sec. 56 et seq., *infra*.

9 See quotation from this case *infra*, sec. 57. Accord Kaler v. Campbell, 13 Or. 596, 11 Pac. 301.

10 127 Cal. 119, 59 Pac. 295.

11 And see Edgar v. Stevenson, 70 Cal. 286, 11 Pac. 704.

12 130 Cal. 290, 296, 62 Pac. 563.

corollary to this. In that case an appropriation had been made of all the water reasonably needed for use on certain riparian land, and the appropriator later purchased the land from the United States. No additional water could be taken by him, it was held; he acquired none additional as riparian right. The decision rests on the finding that he had all he could reasonably use already, and to give him more would be to waste it, and waste is allowed under neither rule.[13] Had there been use for additional water, there is nothing in the case that would have prevented his taking it as a riparian owner, though he was already an appropriator. The combined right may exist, so long as there is no resulting waste.[14]

§ 51. **Corporations.**—A corporation may well appropriate water, and corporations frequently do.[15] It has, however, no advantage over a natural person. The general rule is that no partiality is shown to any class of appropriators.[16] Those engaged in supplying cities and towns with water are the subject of special provision in the various States.[17] They are considered in public service, like common carriers.[18] Water may be appropriated by irrigation districts, under the Wright Act, or they may acquire the right previously existing in the members. They have not, however, any advantage over

13 Accord Low v. Schaffer, 24 Or. 239, 33 Pac. 678.

14 Accord Farnham on Waters, sec. 660; Kinney on Irrigation, sees. 281, 282; criticising Pomeroy on Riparian Rights, sec. 133, which was *contra*.

15 E. g., Montecito etc. v. Santa Barbara, 144 Cal. 578, 77 Pac. 1113; Heyneman v. Blake, 19 Cal. 579; North etc. Co. v. Orient etc. Co., 1 Fed. 522, 6 Saw. 299.

16 See Long on Irrigation, sec. 126.

17 See Appendix.

18 See Gould v. Maricopa etc. Co. (Ariz.), 76 Pac. 598; Crescent Canal Co. v. Montgomery, 143 Cal. 248, 76 Pac. 1032.

individual appropriators and must respect existing rights.[19] The rights of municipal corporations are worked out on the same basis as those of private individuals. A city cannot interfere with private appropriators merely because it is a city.[20] Some cities have succeeded to the old rights of Mexican pueblos, notably Los Angeles, but this right attaches to few cities.[21] True riparian rights or appropriations may vest in cities; but under the same conditions as individuals.[22]

A corporation organized under the laws of a Territory may be an appropriator, as well as one organized under the laws of a State.[23]

19 See *ante*, sec. 21.

20 Santa Barbara v. Gould, 143 Cal. 421, 77 Pac. 151.

21 *Ante*, sec. 2.

22 See Suisun v. De Frietas, 142 Cal. 350, 75 Pac. 1092; Crescent v. Montgomery, 143 Cal. 248, 76 Pac. 1032; Santa Barbara v. Gould, 143 Cal. 421, 77 Pac. 151. See Cal. Stats. 1891, p. 102; Oregon Stats. 1905, p. 77.

23 Gutierres v. Albuquerque etc. Co., 188 U. S. 555.

CHAPTER IV.

WHERE AN APPROPRIATION CAN BE MADE.

A. ON PUBLIC LAND.

§ 52. The first appropriations were all on public land.
§ 53. Revised Statutes of the United States.
§ 54. State lands.
§ 55. Presumption that lands are public.

B. ON PRIVATE LAND.

§ 56. In general, not allowed.
§ 57. Healy v. Woodruff.
§ 58. Cave v. Tyler.
§ 59. Hostile appropriation.
§ 60. With consent of the landowner.
§ 61. By the landowner himself.
§ 62. Review of decisions.

C. RECAPITULATION.

§ 63. Principles stated.

A. ON PUBLIC LAND.

§ 52. The First Appropriations Were All on Public Lands. When the miners arrived in California, but little of the lands composing the State had passed into private hands. When the mines were located and the early customs established, title to the land had passed to the United States by treaty, from Mexico. The license from the United States to appropriate the water was first presumed from acquiescence therein.[1] It is now expressly granted by sections 2339 and 2340 of the Revised Statutes of the United States.[2] "For a long period the general government stood silently by and allowed its

1 *Ante*, chapter I.
2 *Ante*, sec. 24.

citizens to occupy a great part of its public domain in California, and to locate and hold mining claims, water rights, etc., according to such rules as could be made applicable to the peculiar situation; and when there were contests between hostile claimants, the courts were compelled to decide them without reference to the ownership of the government, as it was not urged or presented. In this way—from 1849 to 1866—a system had grown up under which the rights of locators on the public domain, as between themselves, were determined, which left out of view the paramount title of the government. The acts of 1866 and 1870 were intended merely to expressly recognize and ratify this system."[3] It is usually assumed that the appropriator always seeks to make an appropriation on public lands only. No question is any longer raised to his right to do so.

§ 53. **Revised Statutes of the United States.**—The provisions of the statutes of 1866 and 1870 referred to are those now incorporated in sections 2339 and 2340, Revised Statutes, and are as follows:

Revised Statutes, section 2339: "Whenever, by priority of possession, rights to the use of water for mining, agricultural, manufacturing, or other purposes, have vested and accrued, and the same are recognized and acknowledged by the local customs, laws, and the decisions of courts, the possessors and owners of such vested rights shall be maintained and protected in the same; and the right of way for the construction of ditches and canals for the purposes herein specified is acknowledged and confirmed; but whenever any person, in the construction of any ditch or canal, injures or damages the

3 Cave v. Tyler, 133 Cal. 566, 65 Pac. 1089; similarly, Broder v. Natoma Water Co., 101 U. S. 274, 25 L. ed. 790; Osgood v. Eldorado Water Co., 56 Cal. 571.

possession of any settler on the public domain, the party committing such injury or damage, shall be liable to the party injured for such injury or damages."

Revised Statutes, section 2340: "All patents granted, or pre-emption or homesteads allowed, shall be subject to any vested and acrued water rights, or rights to ditches and reservoirs used in connection with such water rights, as may have been acquired under or recognized by the preceding section."

§ 54. **State Lands.**—Of certain lands the State is the owner and the State has likewise made the law of appropriation apply to them in California.[4] In Montana, under similar statutes, the law has been declared to be the same.[5] Similar statutory provisions exist in most of the other States. (See Appendix.)

Swamp lands, an important class of State lands, are dealt with by special statutes.[6]

§ 55. **Presumption that Lands are Public.**—Formerly this preponderance of public lands in fact gave rise to a presumption of law that lands were public, and the party claiming that the lands in suit were private had the burden of proof.[7]

But there is no such presumption to-day for an appropriator to rely on.[8] To-day the larger part of the

4 Civ. Code, secs. 1410-1422; Lux v. Haggin, 69 Cal. 255, 10 Pac. 674; affirmed in Wood v. Etiwanda etc. Co., 122 Cal. 152, 158, 54 Pac. 726; Pomeroy on Riparian Rights, sec. 29.

5 Smith v. Denniff, 24 Mont. 20, 81 Am. St. Rep. 408, 60 Pac. 398, 50 L. R. A. 741.

6 *Infra*, sec. 71.

7 Burdge v. Smith, 14 Cal. 380; Smith v. Doe, 15 Cal. 100. See Pomeroy on Riparian Rights, sec. 93.

8 Santa Cruz v. Enright, 95 Cal. 105, 30 Pac. 197; Cave v. Tyler, 133 Cal. 566, 65 Pac. 1089. But see Natoma etc. Co. v. Hancock, 101 Cal. 42, 53, 31 Pac. 112, 35 Pac. 334.

lands in California and much of the land in other States is no longer public, but has passed into private hands.[9] Such lands, however, as are privately held under possessory rights such as unpatented mining locations, or conditional railway grants, may be forfeited or abandoned; they then again become part of the public domain, as vacant public land, and appropriations of water may be made thereon.[10]

B. ON PRIVATE LAND.

§ 56. **In General not Allowed.**—Most of the land in California and much of the land in other States has to-day passed into private ownership. The questions how far an appropriation of water may be made thereon is of much importance. In the early days, when the land was all public, the question was not mooted and it was assumed that all appropriations were made and could be made on public land only. Such is the general rule to-day. The following is a discussion of the possibility of exceptions to the general rule.

The question is complicated under the California doctrine by the fact that such land has already riparian rights; and the notion obtains (as mentioned in Healy v. Woodruff),[11] that any rights of appropriation would be merged therein. The matter presents no such difficulty under the decisions. The ownership of riparian rights is not the test, and no difficulty arises where the owner thereof goes on the public land to make his appropriation; the two rights are not necessarily inconsistent and

9 It is usually said that no appropriation may be made thereon. *Infra*, sec. 56 et seq.

10 San Jose W. Co. v. San Jose Land Co., 189 U. S. 177, 23 Sup. Ct. Rep. 487, 47 L. ed. 765; San Dimos etc. Co. v. San Jose etc. Co., 142 Cal. 583, 76 Pac. 1128.

11 97 Cal. 464, 32 Pac. 528.

may be held by the same person,[12] so long as the combined right does not result in wastefulness.[13] The difficulty does not arise out of a merger of rights, but out of the fact that an appropriation is a grant from the government, and how can the government make a grant to anyone on land it does not own?

There have been two expressions by the California court upon the matter that are opposite in principle though the decisions are reconcilable on the facts. Both opinions were written by the same judge.[14]

§ 57. **Healy v. Woodruff.**—In Healy v. Woodruff,[15] an owner of a water right on public land later bought up part of the lower riparian land through which the stream flowed. Thereafter he sought more water as an appropriator by enlarging, on public land, the ditch through which the original appropriation had been made. Complaint was made by subsequent claimants. The court says:

"The fact that plaintiff or his grantor was a riparian owner does not warrant the conclusion that he could not be an appropriator—there is, as is said in a play, 'no consonancy in the sequel.' The notion seems to be, that becoming a riparian owner estops one in some sort of a way, from being an appropriator of water, although there be no one in existence in whose favor the estoppel can be evoked. . . . . Counsel for respondents seems to think that because plaintiff's grantor as a riparian owner could have prevented subsequent appropriators from diverting the water above his land and away from

12 Healy v. Woodruff, 97 Cal. 466, 32 Pac. 528; affirmed on this point in Cave v. Tyler, 133 Cal. 566, 65 Pac. 1089.

13 Senior v. Anderson, 130 Cal. 290, 62 Pac. 563. See *ante*, sec. 50.

14 Mr. Justice McFarland.

15 97 Cal. 464, 32 Pac. 529.

it, therefore he could not divert the water himself; but that is a confusion of the distinction between *meum* and *tuum*. Counsel complain that this view gives great advantage to the first possessor and appropriator of the water of a stream. This is no doubt true, but it is the advantage which the law gives, and which necessarily follows prior occupancy and appropriation."

It will be noticed that the additional diversion was made on public land; the court, however, considers riparian ownership of no importance, and the principles announced would have upheld an additional appropriation on his own land, so long as the water came from public land, and no existing claimants were interfered with, disregarding the fact of private ownership, and remaining firm in the simple rule of priority.

§ 58. **Cave v. Tyler.**—On the other hand, in Cave v. Tyler,[16] an appropriation was made in 1853, on private land, while the stream above flowed entirely through public land. Defendant later acquired title to the upper land and interfered with the water. The court says:

"By the congressional acts above noted, the government merely said that whenever it had acquiesced in asserted possessory rights on the public domain, which were upheld by local customs and laws and decisions of the courts, as between the possessors themselves, it would treat those possessors as though they had acquired prescriptive rights against the government, and would recognize such rights whenever afterward granting patents to any part of its land. When a person went upon the public domain and there diverted the water of a stream running thereon, he invaded the rights of the government to its own land, and the government could either resist the invasion or acquiesce

[16] 133 Cal. 566, 65 Pac. 1089.

in it. If it adopted the latter course, then the kind of vested and accrued right grew up which the government by the said acts of Congress promised to protect. But when a party on private land, to which the government had no title, diverts water from a stream what vested rights does he acquire in the water in the upper part of the stream, where it flows through the government land? Such diversion does not interfere in any way with the flow of the stream in the land of the upper proprietor; it does him no injury; it is no invasion of his right; it gives him no cause of action; it leaves no field for the play of consent or acquiescence; it never ripens into title by prescription.

"Under what local custom or law, under what 'decisions of the courts,' was there a 'vested and accrued' right of respondents to all the water of the stream, up through the public domain to its head, thus depriving a large section of country above of its source of fertility? We know of none. In all of the cases to which we have referred, the diversion was upon the public domain. It may be well to say—although the case is not referred to in the briefs—that there is nothing in Healy v. Woodruff, 97 Cal. 464, at all conflicting with the views above expressed. It was merely held there that the plaintiff was not prevented from enlarging his ditch by the fact that since its original construction he had obtained title from the government to 'a piece of land through a small portion of which the said Cedar creek (the stream diverted) runs.' There was no contention that the diversion and the ditch were not on the public domain."

This case appears to be a flat decision that no appropriation can be made on any private land whatever under any circumstances.

In discussing the matter, the question may be considered in three parts: (*a*) Where the appropriation

sought is hostile to the private owner of the land on which sought to be made; (*b*) Where it is done under the consent of the private owner; (*c*) Where the private owner himself seeks to make the appropriation on his own land.

§ 59. **Hostile Appropriation.**—Beyond a doubt, no appropriation of water can be made on private land against the opposition of the owner of the land. An entry upon the land for such purpose is a plain trespass and unlawful, like any trespass on private property. No rights to the water can be obtained thereby, against the landowner.[17] Nor against anyone else. An appropriation, consisting of a grant from the government, cannot be initiated unlawfully by a trespass.[18]

§ 60. **With Consent of the Land Owner.**—An appropriation of water is a grant from the government of rights wherever it has retained them, which it will grant to all who lawfully apply.[19] If this is true, as it certainly is, if we can find rights to the water remaining in the government, and can find that an application for them can be made in a lawful way, the appropriation in this case should be as good as in any other.

If the stream in no place flows over government land, the government has retained no rights and has clearly none to grant to the appropriator. But if the stream flows entirely over public land with the exception of

17 Correa v. Frietas, 42 Cal. 339; Last Chance etc. Co. v. Heilbron, 86 Cal. 1, 26 Pac. 523; Walker v. Emerson, 89 Cal. 456, 26 Pac. 968; Ball v. Kehl, 95 Cal. 606, 30 Pac. 780; Taylor v. Abbott, 103 Cal. 421, 37 Pac. 408; McGuire v. Brown, 106 Cal. 660, 670, 39 Pac. 1060, 30 L. R. A. 384.

18 *Ibid:* and Lux v. Haggin, 69 Cal. 255, 336, 344, 368, 10 Pac. 674; Smith v. Denniff, 24 Mont. 20, 81 Am. St. Rep. 408, 60 Pac. 398, 50 L. R. A. 741; and the note in 43 Am. Dec. 280.

19 *Ante*, sec. 24.

the land where the appropriation is attempted, and there are no prior appropriators, the government has obviously retained very much that it may grant; namely, any right to the water whatsoever which does not interfere with the landowner who, in such case, is the sole existing private claimant on the stream and has consented. If an intermediate case, a simple process of sorting out the existing rights of others on the stream, would show whether an appropriation at the point in question could be made without damage to the use of the prior and vested rights. This is no different from the first question that must be gone into also where the appropriation is on the public land itself.

The government has, then, where part of the course of the stream is on public land, the subject matter proper to be granted, though the land where the appropriation is attempted is private.

Is there anything unlawful in the way it is applied for? We assume that the appropriator and not the landowner proposes to use the water in a beneficial way, without waste, on other lands; so that the pretended difficulty of a merger with the riparian rights of the landowner is obviated.[20]

The consent of the landowner removes any unlawfulness as to him; the appropriation would not be initiated by a trespass. We have started with the assumption that no other claimants are interfered with. But interference with prior private rights is the test, as we have seen.

There seems no reason, then, why, the application is not made in a proper way, and why the case is not just as proper a one for the government to make the grant of the right to the appropriator, who has the landown-

[20] See *supra*, sec. 49.

er's consent, as though the land where the appropriation is attempted were public. It is to the detriment of public land only, if prior claimants are not injured. It seems the natural consequence of the simple rule of priority in the use of the water and the rule that such priority is independent in principle of title to land and is not concerned therewith, and consequently sanctioned by the local rules and decisions within the Revised Statutes.[21] To deny the right would be inconsistent with these rules. In reply to the question above raised, "How can the government make a grant on land it does not own?" it can be answered that the government does not make a grant of anything belonging to the land it does not own, but of the right to the water which it does own as parcel of the public land in the neighborhood.

§ 61. **By the Landowner Himself.**—If the landowner himself seeks to make an appropriation on his own land, we would have the same result, merely recalling again that there is not necessarily any merger of an appropriation and riparian rights. He could make an appropriation on his own land if the stream flows over public land in such a way that the appropriation does not interfere with prior claimants.

§ 62. **Review of Decisions.**—To turn now to the cases, we have those where the right to make an appropriation on private land not hostile or adverse to the owner of the land is inferentially placed on the same footing with the right to make one on public land.[22]

21 *Ante*, sec. 42.

22 It was in effect so held in the following California cases: Edgar v. Stevenson, 70 Cal. 286, 11 Pac. 704; Healy v. Woodruff, 97 Cal. 464, 32 Pac. 528; Watterson v. Saldunbehere, 101 Cal. 107, 35 Pac. 432; Vernon Irr. Co. v. Los Angeles, 106 Cal. 237, 39 Pac. 762; Bath-

In Senior v. Anderson,[23] the appropriation had been made on the homestead of a stranger to the suit, who had long acquiesced. The court, while finding it unnecessary to decide the point, said, by way of *dictum*, that this was a good appropriation against all but the landowner, who had, by his long acquiescence shown his consent. The following quotation is entirely in point:

"The remaining finding to be considered is that the point of diversion of the water by Senior was on the homestead land of Mrs. Hines; from which it is claimed by the respondent, that the plaintiffs' appropriation was void, and we are cited to several cases as supporting this contention. (Sturr v. Beck, 133 U. S. 541, 10 Sup. Ct. Rep. 350, 33 L. ed. 761; Taylor v. Abbott, 103 Cal. 421, 37 Pac. 408; McGuire v. Brown, 106 Cal. 660, 39 Pac. 1060, 30 L. R. A. 384.) But these cases cited differ materially from the case at bar, being all of them cases between the appropriator and the owner of the land on which the entry was made, and being also cases of intentional trespass by the former upon the latter."

In San Jose Land & Water Co. v. San Jose Ranch Co.,[24] an appropriation made on private land (railway grant) was held valid after the land had been forfeited and had become again public; the decision holding it good from the start by relation back. In Bathgate v. Irvine,[25] it was assumed that the only reason why the plaintiff's attempted appropriation on his own land was not good was because there were upper prior claim-

gate v. Irvine, 126 Cal. 135, 77 Am. St. Rep. 158, 58 Pac. 442; Senior v. Anderson, 130 Cal. 290, 62 Pac. 563; Senior v. Anderson, 138 Cal. 716, 72 Pac. 349. To the same effect, Farnham on Waters, secs. 2043, 2051.

23 138 Cal. 716, 72 Pac. 349.

24 129 Cal. 673, 62 Pac. 269.

25 126 Cal. 135, 77 Am. St. Rep. 158, 58 Pac. 442.

ants. In Healy v. Woodruff,[26] the language used is entirely in support of this view. To these cases must be added the early ones where the private owner's rights were chiefly discussed on the ground of actual appropriation, assuming the point.[27]

Against this view on principle, and these cases, there are the cases speaking of the right generally as one on public land which were speaking of the general fact when the land was so largely public land, this question not having arisen and not being in mind; and also the cases deciding with Lux v. Haggin, making similar statements (that appropriations of water could be made only on public land), when they were upholding the riparian rights of prior occupants on the stream, again not having in mind a case where prior occupants were not interfered with.[28] But chiefly the cases of City of Santa Cruz v. Enright, 95 Cal. 105, 30 Pac. 197, and Cave v. Tyler, 133 Cal. 566, 65 Pac. 1089, both pretending to be direct decisions on the point.

In the former it was held that the appropriation attempted in that case was not good because there was no proof that the land was public land. No reason was given why such proof was necessary. But the fact appears that there were many existing claimants on the stream with whose rights the appropriation, if allowed, would have interfered. The bare remark of the court that proof must be made of the land being public was hence not necessary to the decision—the point was immaterial.

In the latter (Cave v. Tyler) the court did go into the matter, as shown in the passage quoted above, and

26 97 Cal. 464, 32 Pac. 528. *Supra*, sec. 57.

27 *Supra*, sec. 15. In the cases cited in Farnham on Waters, secs. 2043 and 2051, this view also finds support.

28 Such is the point of view of Pomeroy on Riparian Rights, chapter III (see sec. 43).

the language used is entirely opposed to any right to appropriate water on private land under any circumstances. But the argument, as seen in the passage quoted, bases the right of appropriation on an analogy to adverse use or prescription and is hence opposed to accepted fundamental principles. We have already shown the established doctrine that an appropriation is, by virtue of Revised Statutes of the United States, sections 2339 and 2340, equivalent to an express grant;[29] and it will be seen from the rules composing the system as a whole (to be set forth hereafter) that an appropriation in no way depends for its creation or terms upon the requisites necessary to raise the implied grant of the common-law prescription.

That an appropriation is not based on an analogy to prescription was declared expressly in Smith v. Hawkins, saying:[30]

"An appropriator of water under these circumstances, and while the land which he subjects to his necessary uses continues to be part of the public domain, is a licensee of the general government; but when such part of the public domain passes into private ownership it is burdened by the easement granted by the United States to the appropriator, who holds his rights against this land under an express grant. In this essential respect, that is to say, in the origin of the title under which the servient tenement is subjected to the use, one holding water rights by such appropriation differs from one who holds water rights by prescription.

"The differences are twofold. A prescriptive right could not be acquired against the United States, and can be acquired only by one claimant against another private individual. Again, such an appropriation, to

29 *Ante*, sec. 24.

30 110 Cal. 122, 42 Pac. 453.

perfect the rights of the appropriator, does not necessitate use for any given length of time, while time and adverse use are essential elements to the perfection of a prescriptive right."

The argument in Cave v. Tyler rests on the false assumption that would substitute the tests of common-law prescription in the place of the simple rule of priority.

Even if the principles on which Cave v. Tyler rests were correct, they would not support the conclusion that no appropriation could in any case be made on private land. The reasoning would apply to public and private land alike, and leave no distinction between the two, since the question of invasion of actual use of water is one of physical fact, independent of the abstract notion of title to land. There would be the same result whether the appropriation were made on land that is private or public. The reasoning would prove that no appropriation could be made against use above, where the natural flow is not invaded, whether on land that is public or private; it would likewise prove that it could well be made as against use below where the use in fact is invaded, whether the land be public or not; and would support an appropriation on private lands against later comers below. The distinction between public and private lands contended for by the case, by no means follows from the reasoning; and the conclusions that do follow from the reasoning, applying the principles of adverse use, and distinguishing appropriators above and below, are contrary to the established simple rule of priority.

That the argument in Cave v. Tyler is based on a wrong view of the doctrine of appropriation is shown by the query, "Under what local custom or law, under what 'decisions of the courts,' was there 'a vested and

accrued right of respondents to all the water of the stream, up through the public domain to its head, thus depriving a large section of country above of its source of fertility?" It may be noted that this is an exaggeration, since a use above could well be made by later comers of the surplus, or of the whole if returned to the stream without damage to the prior appropriation, as in the many and frequent cases of successive appropriation, a question long since answered satisfactorily. But aside from this, the law of appropriation is based on the right to do that very thing in a case of priority.[31]

Like the Santa Cruz case, *supra*, Cave v. Tyler may be supported on its facts. There was evidence that the point of diversion was on land held under a Mexican grant, with which plaintiff did not connect himself. His claim was a broad one of adverse use as well as of appropriation. From this failure to connect himself with the private owner of the land, and these broad claims to adverse use, together with the fact that he made no claim as riparian proprietor, it may be inferred that the appropriator was seeking to maintain a right of appropriation initiated by a trespass upon private property, his claim by adverse use having failed; and, of course, this cannot be done.[32]

The broad principle asserted in Cave v. Tyler is opposed to the result reached in other jurisdictions, as the following passages show: In Washington:[33] "The fact appearing that respondent first diverted water

31 See especially, Pomeroy on Riparian Rights, sec. 92.

32 *Supra*, sec. 58. A reference to the Supreme Court Records, volume 2178, page 1, shows that this point, upon which the court so strongly relied, was raised only in the reply brief, and only in a very short paragraph (page 137), showing that counsel regarded it as unimportant.

33 Offield v. Ish, 21 Wash. 277, 57 Pac. 809.

from the stream where it ran through his own premises does not militate against his appropriation." In Montana:[34] "Now, being the owner of riparian land he can, as has been shown, legally exercise this privilege on his own land; and, when he has perfected such inchoate right by fulfilling the requirements of the statute, the legal title to such water rights becomes vested in him, ... by reason of statutory grant." In Oregon:[35] "The right of prior appropriation is limited to the use of water by the pioneer settler before any adverse claims of riparian proprietors attach to the stream from which the water is taken, and not to the point of diversion, which may be either within or beyond the boundaries of the tracts selected by such settler." Adding that to make him go above his boundary to divert might be so expensive as to be prohibitive and so retard settlement. In all of these jurisdictions the combined system of appropriation and riparian rights is in force as in California.

C. RECAPITULATION.

§ 63. The following principles would seem to follow in all jurisdictions:

a. An appropriation can be made on public lands, wherever it is possible to do so without interfering with prior appropriations, or, under the California doctrine, with the riparian rights of prior occupants.

b. An appropriation cannot be made on private land hostile to the owner thereof. Consequently it is a general rule that an appropriation cannot be made on private land.

c. An appropriation can be made on private land with the consent of the owner thereof or by the owner him-

34 Smith v. Denniff, 24 Mont. 20, 81 Am. St. Rep. 408, 60 Pac. 398, 50 L. R. A. 741.

35 Brown v. Baker, 39 Or. 66, 65 Pac. 799.

self, subject to the same conditions as on public land; viz., wherever it is possible to do so without interfering with prior appropriations or, under the California doctrine, with the riparian rights of prior occupants. The field where this is possible is becoming smaller and smaller, and it is hence an exception to the general rule; but is still open in some places, and the cases opposing this view are distinguishable.

CHAPTER V.

WHAT CAN BE APPROPRIATED.

A. SURFACE WATER.

§ 64. Water in a surface watercourse.
§ 65. What constitutes a watercourse.
§ 66. Navigable streams.
§ 67. Interstate streams.
§ 68. Artificial watercourses.
§ 69. Diffused surface water.
§ 70. Lakes and ponds.
§ 71. Swamp lands.

B. UNDERGROUND WATER.

§ 72. In general.
§ 73. Definite underground streams.
§ 74. The sub-flow of a stream.
§ 75. Sub-flow defined.
§ 76. Sub-flow may be appropriated.
§ 77. Percolating water.
§ 78. Percolating water may be appropriated.
§ 79. Underground reservoir.
§ 80. Effect of the new rule.

A. SURFACE WATER.

§ 64. Water in a Surface Watercourse.—Water in a surface watercourse is the type case of appropriation. The cases almost invariably speak only of "running streams," "flowing water," "water in a watercourse." This is also the language of the California Civil Code[1] providing what can be appropriated. "The right to the use of running water flowing in a river or stream or down a canyon or ravine, may be acquired by appropriation."

[1] Sec. 1410.

§ 65. **What Constitutes a Watercourse.**—Close questions arise as to what is and what is not a watercourse. In Lux v. Haggin[2] the court discusses at length the requisites for a watercourse, and concludes that a channel is necessary to the constitution of a watercourse,[3] and also a tendency of water to flow in it more or less regularly.[4] The second requisite is not fulfilled by a chance flow in a channel usually dry all year round,[5] though, on the other hand, the channel need not be full all year round.[6] It is a question of fact whether there is a tendency to regular flow, and no presumption of continuance can be indulged from proof of a single flow.[7]

Water from a spring is water in a watercourse, however small, if it runs off in a definite channel, with a tendency to regularity;[8] and may be appropriated as water in a watercourse,[9] even though the appropriator builds a ditch to the very mouth of the spring.[10] The water in the spring itself, however, that is, before it has gathered on the surface, is not water in a surface watercourse, but is treated on the principles of underground water.[11]

The following definition is quoted from Sanguinetti v. Pock:[12]

"A watercourse is defined to be 'a running stream of water; a natural stream, including rivers, creeks, runs,

2 69 Cal. 255, at 413-419, 10 Pac. 674.

3 Accord Razzo v. Varni, 81 Cal. 289, 22 Pac. 848.

4 Accord Barnes v. Sabron, 10 Nev. 217.

5 Lux v. Haggin, *supra*.

6 Spangler v. San Francisco, 84 Cal. 12, 18 Am. St. Rep. 158, 23 Pac. 1091.

7 Lux v. Haggin, *supra*.

8 See Pomeroy on Riparian Rights, sec. 62.

9 Wilkins v. McCue, 46 Cal. 656.

10 Ely v. Ferguson, 91 Cal. 187, 27 Pac. 587.

11 Cohen v. La Canada Water Co., 142 Cal. 437, 76 Pac. 47.

12 136 Cal. 466 at 471, 89 Am. St. Rep. 169, 69 Pac. 98.

and rivulets.' (Black's Law Dictionary, title Watercourses.) Further defining the term, this court said: 'There must be a stream, usually flowing in a particular direction, though it need not flow continually. It may sometimes be dry. It must flow in a definite channel, having a bed or banks, and usually discharge itself into some other stream or body of water. It must be something more than a mere surface drainage over the entire face of the tract of land, occasioned by unusual freshets or other extraordinary causes. It does not include the water flowing in the hollows or ravines in land, which is mere surface water from rain or melting snow (*i. e.*, snow lying and melting on the land), and is discharged through them from a higher to a lower level, but which at other times are destitute of water. Such hollows or ravines are not, in legal contemplation, watercourses.' (Los Angeles etc. Assn. v. Los Angeles, 103 Cal. 466, 37 Pac. 375; citing text-books and cases.) The evidence does not bring the depression or swale in question within this definition. This so-called watercourse is nothing more than a local drainway to a limited amount of land which has neither a definite beginning nor ending, and is like hundreds of similar swales found in land whose surface may be called generally level."[13]

Depressions in the prairies due to the rolling character of the ground, where the surface water drains, are not watercourses.[14]

Besides the essential requisites of a channel and a flow, some courts have recently recognized two common characteristics as also usually present: (*a*) A sub-flow, seeping with the stream in the soaked soil beneath the bed; (*b*) A diffused movement of ground water down

[13] In general, see Pomeroy on Riparian Rights, secs. 6, 62.

[14] Gibbs v. Williams, 25 Kan. 214, 37 Am. Rep. 249.

the sides of the watershed toward the bed.[15] These are now treated by those courts as part of the stream itself. They will be matter for discussion hereafter, in speaking of underground waters.[16]

§ 66. **Navigable Streams.**—The water of navigable streams may be appropriated as well as the water of those not navigable. Thus, for example, a dam in the San Joaquin River at a point where it is navigable, and an appropriation of water there, were upheld against all but the state or some one injured in navigating.[17] Whether the point could be raised by the State or those injured in navigating was not decided. The rights on navigable streams are in general all that can be exercised without being inconsistent with the public easement of navigation.[18] It may be remarked that the title to the bed of navigable streams is in the State.[19]

§ 67. **Interstate Streams.**—Recently several cases have been decided concerning the rights of appropriators on a stream which crosses a State boundary. The cases are unanimous that no innovations in the law of appropriation are necessary on that account. "Water is essential to human life in the same degree as light and

15 Craig v. Crafton Water Co., 141 Cal. 178, 74 Pac. 762; Montecito etc. Co. v. Santa Barbara, 144 Cal. 578, 77 Pac. 1113.

16 *Infra*, sec. 72 et seq.

17 Miller v. Enterprise etc. Co., 142 Cal. 208, 100 Am. St. Rep. 115, 75 Pac. 770.

18 Heilbron v. Fowler etc. Canal Co., 75 Cal. 426, at 433, 7 Am. St. Rep. 183, 17 Pac. 535; United States v. Rio Grande etc. Co., 174 U. S. 690, 19 Sup. Ct. Rep. 770, 43 L. ed. 1136.

19 Green v. Swift, 47 Cal. 536; Wright v. Seymour, 69 Cal. 122, 10 Pac. 323; Packer v. Bird, 71 Cal. 134, 11 Pac. 873; Cardwell v. Sacramento, 79 Cal. 347, 21 Pac. 763. See Cal. Pol. Code, 2875, 3479; Cal. Civ. Code, sec. 670. See Long on Irrigation, sec. 34, accord.

air, and no bounds can be set to its use for supplying the natural wants of men other than the mighty barriers which the Creator has made on the face of the earth," says Judge Hallett.[20]

A case of much interest that has been in court for several years is that of Miller & Lux v. Rickey.[21] That case involved rights on the Walker River, which rises in the Sierras in California, and flows east across the sands of Nevada, terminating in Walker Lake. The use of the waters of the river for irrigation has caused the lake to shrink alarmingly. The plaintiff sued in Nevada for injury to his rights in Nevada, the defendant being among those who diverted the water in California. Judge Hawley, in the circuit court, upheld the right to bring suit. Interesting developments in this connection may be expected from the litigation recently started over the use of the waters of Lake Tahoe, which is situated partly in Nevada and partly in California. The waters of this lake are to be dammed on the California side by the United States Reclamation Service and conducted through the Truckee River to irrigate Nevada lands. The Truckee River itself, moreover, flows through both States. The objection comes from the owners of summer homes and hotels on the lake, and manufacturing and lumber companies on the river, and from the State of California generally, which has long taken pride in the natural beauties of Lake Tahoe. At one time there was a project to divert the lake waters for water supply for San Francisco, but this was given up because of the objection raised by Nevada. An injunction against the present work has been sought in California, suit being brought in the superior court of

[20] In Hoge v. Eaton, 135 Fed. 411 (C. C. Colo.).

[21] 127 Fed. 573 (C. C. Nev.).

San Francisco on the ground of personal jurisdiction over the parties.

The recent case of Willey v. Decker [22] made a thorough examination of the question of the conflict of laws as it concerns the appropriation of water. The following principles may be deduced from that case, and will be found supported by the other decisions on the point. The case involved the rights on a stream which flowed from Montana into Wyoming, plaintiff's diversion having also been made in Montana for use in Wyoming.

(*a*) The separation of the stream by State lines does not lessen the right to make an appropriation upon it in a State where appropriation is allowed.

(*b*) The appropriation thus made in a State where the law of appropriation is recognized is independent of the place to which the water is conducted, and an appropriation may hence be made in one State for use in any other to which the water may be conducted.[23]

(*c*) Rights on a stream valid in the State where obtained are recognized in all other States; and hence, not only is the appropriation recognized in other States, but likewise prior rights on the stream obtained in other States, whether of appropriation or riparian rights, will be everywhere else accorded recognition, and the appropriator will not be allowed to interfere with them. The fact that riparian rights are recognized in one of the States (Montana following the California doctrine) and not in the other (Wyoming rejecting the California doctrine) is hence immaterial. The Wyoming court will, on the principles of comity, recognize the riparian

22 11 Wyo. 496, 100 Am. St. Rep. 939, 73 Pac. 210.

23 Accord Howell v. Johnson, 89 Fed. 556, and Morris v. Bean, 123 Fed. 618, the latter, like Willey v. Decker, upholding a diversion in Montana for use in Wyoming. Also Hoge v. Eaton, 135 Fed. 411.

rights existing in Montana, just as it will recognize the appropriations made there.

(*d*) Where the waters diverted in the upper State (Montana) are ditched across the boundary into the lower (Wyoming), the court in the lower State may enjoin a hostile diversion in the upper State, because a ditch (with the water right appurtenant thereto) is an entirety and the injury follows all along the line, making the hostile diversion in Montana likewise an injury in Wyoming. This obviates the difficulty arising from the rule that the courts of one State will not adjudge matters involving title to real estate situated in another State.

(*e*) Whether an action in the lower State to quiet title against claims in the upper State would lie was left open; but in Conant v. Deep Creek etc. Co.[24] it was held that it would not lie, for the reason just given.[25]

The threatened pollution of the waters of a river flowing between States, under the authority of one of them, thereby putting the health and comfort of the citizens of the other in jeopardy, presents a cause of action justiciable under the constitution; that is, the supreme court of the United States will have original jurisdiction if one of the States brings suit against the other.[26]

The case of Willey v. Decker is valuable, not only for

[24] 23 Utah, 627, 90 Am. St. Rep. 721, 66 Pac. 188.

[25] These general principles will be found also in the following cases: Howell v. Johnson, 89 Fed. 556; Perkins County v. Groff, 114 Fed. 441, 52 C. C. A. 243.; Miller & Lux v. Rickey, 127 Fed. 573; Hoge v. Eaton, 135 Fed. 411; Morris v. Bean, 123 Fed. 618. In Hoge v. Eaton it was held that a constitutional provision to the effect that waters are the property of the State cannot be construed to interfere with these views.

[26] Missouri v. Illinois etc. District, 180 U. S. 208, 21 Sup. Ct. Rep. 331, 45 L. ed. 497. See this case commented on in Kansas v. Colorado, 185 U. S. 125, 22 Sup. Ct. Rep. 552, 46 L. ed. 838.

its discussion of the conflict of laws as applied to water rights, but equally for its review of the principles on which the law of appropriation is rested, and its relation to riparian rights.[27]

§ 68. **Artificial Watercourses.**—Water in ditches, canals, flumes, etc., cannot be appropriated. It is personalty, and subject to the absolute property of its owner. The law of appropriation applies only to natural bodies of water. The law concerning artificial watercourses will be considered later.[28]

§ 69. **Diffused Surface Water.**—Diffused surface water from rain and melted snow cannot be appropriated.[29] Its presence and movements are too capricious to found any right upon distinct from the land where it is gathered, and such water is owned by the owner of the land where it happens to lie. In fact, the question that usually gives difficulty is how to get rid of it, some courts calling it a common enemy; but that is another question.[30]

"In a dry and arid climate, where irrigation is necessary in order to cultivate the soil, the question as to the rights of the proprietors of upper and lower lands in regard to the waste water has seldom arisen, because, as a general rule, the lower land owner is willing to receive, dispose of, and profit by the use of, all water flowing from the upper lands of another in irrigating

27 *Ante*, sec. 23 et seq.

28 *Infra*, sec. 128 et seq.

29 Lux v. Haggin, 69 Cal. 255, 10 Pac. 674; Jacob v. Lorenz, 98 Cal. 332, at 339, 33 Pac. 119; Los Angeles Assn. v. Los Angeles, 103 Cal. 461, 37 Pac. 375; Sanguinetti v. Pock, 136 Cal. 466, 89 Am. St. Rep. 169, 69 Pac. 98.

30 See Ogburn v. Conners, 46 Cal. 346, 13 Am. Rep. 213, and McDaniel v. Cummings, 83 Cal. 515, 23 Pac. 795.

his own land. It is seldom that any landowner in this State has occasion to complain of too much water."[31]

§ 70. **Lakes and Ponds.**—Whether waters of a lake or pond can be appropriated is seldom discussed. The cases almost invariably speak only of water flowing in watercourses.[32]

The recent statutes in the arid States usually expressly include lakes, or else contain such general words as "all waters of the State," or "all streams and water sources," which would cover the matter.[33] In California, however, the statute[34] speaks only of streams and running water. However, riparian rights attached at common law to lakes and ponds. The law of appropriation is assumed likewise to apply to them, though the point is not specifically raised.[35] It is probable that lake water may be appropriated in California as elsewhere, though not mentioned in Civil Code, section 1410, for the California court has said (in another connection) that that section is not exhaustive of the kinds of water that can be appropriated.[36]

§ 71. **Swamp Lands.**—Title to public lands of this character in California rests in the State of California, not

31 Boynton v. Longley, 19 Nev. 69, 3 Am. St. Rep. 781, 6 Pac. 437.

32 And such also is the language of Cal. Civ. Code, sec. 1410.

33 See Appendix.

34 Civ. Code, 1410.

35 Weaver v. Eureka etc. Co., 15 Cal. 271, and Osgood v. El Dorado etc. Co., 56 Cal. 571; a *dictum* to the same effect appears in Baxter v. Gilbert, 125 Cal. 580, 58 Pac. 129, 374.

36 Katz v. Walkinshaw, 141 Cal. 116, 99 Am. St. Rep. 35, 70 Pac. 663, 74 Pac. 766. The appropriation of the waters of a lake was upheld in Cole v. Richards Irr. Co., 27 Utah, 205, 101 Am. St. Rep. 962, 75 Pac. 376. See, also, Pomeroy on Riparian Rights, sec. 51. Assumed in Kinney on Irrigation, *passim*.

the United States, and they are dealt with by special statutes and rules of their own.[37]

Rules for the disposal of swamp lands in California are contained in the Political Code, part 3, title 8, chapter 2. Section 3446, Political Code,[38] provides that when-

37 The law concerning them is discussed in Lux v. Haggin, 69 Cal. 255, 10 Pac. 674; Heckman v. Swett, 99 Cal. 303, 33 Pac. 1099.

38 Concerning reclamation districts, reference may be made to the following cases (see, also, cases on irrigation districts cited ante, sec. 21): Kimball v. Reclamation District Fund Commrs., 45 Cal. 344; Hagar v. Board of Supervisors, 47 Cal. 222; People v. Coghill, 47 Cal. 361; Bachman v. Meyer, 49 Cal. 220; People v. Hagar, 49 Cal. 229; Ferran v. Board of Supervisors, 51 Cal. 307; Hagar v. Board of Supervisors, 51 Cal. 474; Ralston v. Board of Supervisors, 51 Cal. 592; People v. Hagar, 52 Cal. 171; People v. Ahern, 52 Cal. 208; People v. Reclamation Dist., 53 Cal. 346; People v. Houston, 54 Cal. 536; People v. Williams, 56 Cal. 647; Reclamation Dist. No. 124 v. Coghill, 56 Cal. 607; Levee Dist. No. 1 v. Huber, 57 Cal. 41; People v. Haggin, 57 Cal. 579; Williams v. Board of Supervisors, 58 Cal. 237; Cosner v. Board of Supervisors, 58 Cal. 274; Reclamation Dist. No. 3 v. Kennedy, 58 Cal. 124; Bixler's Appeal, 59 Cal. 550; Mitchell v. Hecker, 59 Cal. 558; Bixler v. Board of Supervisors, 59 Cal. 698; Swamp Land Dist. No. 110 v. Feck, 60 Cal. 403; Reclamation Dist No. 3 v. Goldman, 61 Cal. 205; Reclamation Dist. No. 108 v. Evans, 61 Cal. 104; Newman v. Superior Court, 62 Cal. 545; Swamp Land Dist. No. 121 v. Haggin, 64 Cal. 204, 30 Pac. 631; Williams v. Board of Supervisors, 65 Cal. 160, 3 Pac. 667; Reclamation Dist. No. 3 v. Goldman, 65 Cal. 635, 4 Pac. 676; Reclamation Dist. No. 108 v. Hagar, 66 Cal. 54, 4 Pac. 945; People v. Hagar, 66 Cal. 59, 4 Pac. 951; Reclamation Dist. No. 3 v. Parvin, 67 Cal. 501, 8 Pac. 43; People v. La Rue, 67 Cal. 526, 8 Pac. 84; Swamp Land Dist. No. 307 v. Gwynn, 70 Cal. 566, 12 Pac. 462; People v. Hulbert, 71 Cal. 72, 12 Pac. 43; Standford v. Felt, 71 Cal. 249, 6 Pac. 900; Lamb v. Reclamation Dist. No. 108, 73 Cal. 125, 2 Am. St. Rep. 775, 14 Pac. 625; People ex rel. Attorney General v. Parvin, 74 Cal. 549, 16 Pac. 490; Swamp Land Dist. No. 407 v. Wilcox, 75 Cal. 443, 17 Pac. 241; Hutson v. Woodbridge Protection Dist. No. 1, 79 Cal. 90, 61 Pac. 549, 21 Pac. 435; Lord v. Dunster, 79 Cal. 477, 21 Pac. 865; People v. Gunn, 85 Cal. 238, 24 Pac. 718; Reclamation Dist. No. 124 v. Gray, 95 Cal. 601, 30 Pac. 779; Swamp Land Dist. No. 150 v. Silver, 98 Cal. 51, 32 Pac. 866; Marshall v. Taylor, 98 Cal. 55, 35 Am. St. Rep. 144, 32 Pac. 867; Gwynn v. Diersen, 101 Cal. 563, 36 Pac. 103; Reclamation Dist. No. 542 v. Turner, 104 Cal. 334, 37 Pac. 1038; Lower Kings River Recla-

ever the owners of more than one-half of any body of swamp land and overflowed lands desire to reclaim the same, they may present to the board of supervisors a petition for the formation of a reclamation district. Prior to the enactment of the Political Code, similar legislation existed in the statutes, and section 3478 of the Political Code allowed reclamation districts formed under laws prior to March 27, 1868, to be reorganized. (See San Francisco Savings Union v. Reclamation District, 144 Cal. 639.) It is held that the Political Code vests in the supervisors absolutely the determination whether the lands are unreclaimed and whether they are subject to independent reclamation; and being so vested, the determination is legislative in its nature, and the courts are powerless to interfere, or to restrain the exercise of the power by the board of supervisors. (Glide v. Superior Court, 148 Cal. ——, 81 Pac. 225.)

mation Dist. No. 531 v. Phillips, 108 Cal. 306, 39 Pac. 630, 41 Pac. 335; Swamp Land Dist. No. 307 v. Glide, 112 Cal. 85, 44 Pac. 451; Barnes v. Glide, 117 Cal. 1, 59 Am. St. Rep. 153, 48 Pac. 804; People ex rel. Sels v. Reclamation Dist. No. 551, 117 Cal. 114, 48 Pac. 1016; Reclamation Dist. No. 551 v. Ranyon, 117 Cal. 164, 49 Pac. 131; Tulare County v. May, 118 Cal. 303, 50 Pac. 427; People v. Reclamation Dist. No. 36, 121 Cal. 522, 50 Pac. 1068, 53 Pac. 1085; Hensley v. Reclamation Dist., 121 Cal. 96, 53 Pac. 401; Weinreich v. Hensley, 121 Cal. 647, 54 Pac. 254; Reclamation Dist. No. 537 v. Burger, 122 Cal. 442, 55 Pac. 156; Clare v. Sacramento Electric etc. Co., 122 Cal. 504, 55 Pac. 326; People ex rel. Cuff v. City of Oakland, 123 Cal. 598, 59 Pac. 445; Lower Kings River Reclamation Dist. No. 531 v. McCullah, 124 Cal. 175, 56 Pac. 887; California Pastoral Co. v. Whitson, 129 Cal. 376, 62 Pac. 28; Reclamation Dist. No. 108 v. West, 129 Cal. 622, 62 Pac. 272; In re Werner, 129 Cal. 567, 62 Pac. 97; People ex rel. Thisby v. Reclamation Dist., 130 Cal. 607, 63 Pac. 27; People v. Levee Dist., 131 Cal. 30, 63 Pac. 676; Adams v. Modesto, 131 Cal. 501, 63 Pac. 1083; Reclamation Dist. No. 563 v. Hall, 131 Cal. 662, 63 Pac. 1000; National Bank v. Greenlaw, 134 Cal. 673, 66 Pac. 963; McCord v. Slavin, 143 Cal. 325, 76 Pac. 1104; San Francisco Savings Union v. Reclamation Dist. No. 124, 144 Cal. 539, 79 Pac. 374; Reclamation Dist. No. 551 v. Van Loben Sels, 145 Cal. 181, 78 Pac. 638; Glide v. Superior Court, 148 Cal. —, 81 Pac. 225.

B. UNDERGROUND WATER.

§ 72. **In General.**—Underground water is the kind concerning which the law of waters is undergoing its greatest of all changes in the West. It may be said tentatively that underground water is to-day in California treated like water on the surface. This statement may, it is true, be too wide; but it may be noted at least that in Katz v. Walkinshaw[39] (the leading case) the court held that there was no difference in pleading, and that an action for "diversion of water" will cover either kind. Some of the other Western States are following California in this; others are very likely to do so.

§ 73. **Definite Underground Streams.**—The first class of underground water is water flowing in a defined underground stream. This has always been treated on the same principles as surface streams, even at common law.[40] It can undoubtedly be appropriated.[41] The presumption is against the existence of a definite underground stream.[42]

The question of underground streams shades off into the question of sub-flow of surface streams, next to be considered. That is, when the surface water disappears in the dry season, there may still be a seepage down the channel that does not appear on the surface. Such a case was dealt with as a subterranean stream in Los Angeles v. Pomeroy.[43] Again, the stream may

39 141 Cal. 116, 99 Am. St. Rep. 35, 70 Pac. 663, 74 Pac. 766.

40 Hanson v. McCue, 42 Cal. 303, at 308, 10 Am. Rep. 299; Cross v. Kitts, 69 Cal. 217, 58 Am. Rep. 558, 10 Pac. 409; Lux v. Haggin, 69 Cal. 255, at 394, 10 Pac. 674; Hale v. McLea, 53 Cal. 578; Strait v. Brown, 16 Nev. 317, 40 Am. Rep. 497; Pomeroy on Riparian Rights, sec. 63; Farnham on Waters, p. 2084.

41 Ibid; Kinney on Irrigation, sec. 298; Howard v. Perrin (Ariz.), 76 Pac. 460.

42 Hanson v. McCue, 42 Cal. 303, 10 Am. Rep. 299.

43 124 Cal. 597, at 632, 57 Pac. 585.

flow only in parts of its course on the surface, being carried over the drier spots by means of the sub-flow. Intermittent streams of this character are treated as a single stream.[44] Such a stream has been considered simply as an underground stream.[45]

§ 74. **The Sub-flow of a Stream.**—The second class of underground water is water seeping underground from beneath a definite surface stream. It is a scientific fact that below every river-bed not absolutely impervious there is a more or less deep sub-stratum of flow seeping with the stream through the soaked soil, the drawing off of which results in a tapping of the stream itself. The recognition of this at law as a component of a stream is due to stubborn litigation of rights on streams in the southern part of California.[46]

§ 75. **Sub-flow Defined.**—The sub-flow of a stream is thus defined in Los Angeles v. Pomeroy,[47] affirming the following charge of the trial court:

"If you find from the evidence that there is a bed or a river bottom filled to a considerable depth with sand, gravel, or other porous material, meandering over which a stream runs on the surface, and through and in which the water moves underground, enough of it rising to the surface to supply the surface stream, and the other portions of the underground water moving with a

44 Los Angeles v. Pomeroy, 124 Cal. 597, 57 Pac. 585.

45 Yarwood v. West Los Angeles Co., 132 Cal. 204, 64 Pac. 275.

46 See Gould v. Eaton, 111 Cal. 639, 52 Am. St. Rep. 201, 44 Pac. 319; Gould v. Eaton, 117 Cal. 639, 49 Pac. 577, 38 L. R. A. 181; Barker v. Gould, 122 Cal. 240, 54 Pac. 845; Los Angeles v. Pomeroy, 124 Cal. 597, 57 Pac. 585; Vineland v. Azusa etc., 126 Cal. 486, 58 Pac. 1057; McClintock v. Hudson, 141 Cal. 275, 74 Pac. 849; Montecito etc. Co. v. Santa Barbara, 144 Cal. 578, 77 Pac. 1113.

47 124 Cal. 597, at 623, 57 Pac. 585.

a much less velocity than the surface stream, and through a wider or larger space in and through the interstices of the porous material, but in the same general direction as the surface stream and in connection with it, and in a course and within a space reasonably well defined, the conditions being such that the existence and general direction of the body of water moving underground can be determined with reasonable accuracy, then that portion of the water thus moving underground should be considered as a part of the watercourse as well as that part which flows over the surface."

And again, in Vineland Irr. Dist. v. Azusa Irr. Co.:[48]

"The existence of a well-defined sub-surface flow within the bed and banks of streams such as this is well recognized. Says Kinney on Irrigation, section 44: 'At certain periods of the year water flows on the surface in a well-defined course, and there is at all times what is known as the underflow. This is the broad and deep subterranean volume of water which slowly flows through the sand and gravel underlying most, if not all, the streams which traverse the country adjacent to the mountain systems of the arid region. These underground streams are probably much greater in volume in some cases than the water upon the surface, and are, as far as rights of appropriation or riparian rights are concerned, but a valuable portion of the well-defined surface stream.'"

The existence of a sub-flow is a question of fact;[49] the evidence necessary to establish it is further discussed in McClintock v. Hudson.[50] It was first recognized in Los Angeles v. Pomeroy,[51] the pioneer case, though it

48 126 Cal. 486, at 494, 58 Pac. 1057, 46 L. R. A. 820.

49 Los Angeles v. Pomeroy, 124 Cal. 597, at 632, 57 Pac. 585.

50 141 Cal. 275, 74 Pac. 849.

51 124 Cal. 597, 57 Pac. 585.

had already been repeatedly urged upon the court.[52] It has also received recognition in Colorado[53] and in Utah.[54]

§ 76. **Sub-flow may be Appropriated.**—This sub-flow is in its nature a fit subject matter for appropriation. It may be appropriated separately by a tunnel,[55] or (a matter of much more importance) an appropriation of a stream is an appropriation of the sub-flow also, as an incident.[56] The usual test of priority governs the rights of the claimants here as elsewhere. Prior appropriators of the sub-flow by direct tunneling or prior appropriators or occupants on the surface stream must be protected first.[57]

"One who has no legal right to the surface flow of the stream may not, by indirection, acquire that right by a subterranean tapping and taking of it. Riparian proprietors and appropriators of the surface water still have the right to invoke the maxim, '*Aqua currit et debet currere ut currere solebat.*'"[58] In Los Angeles v. Pomeroy[59] the court said:

"Subterranean water . . . . is a part of the stream (as in other instructions defined), and if it is a part of

52 See Gould v. Eaton, 111 Cal. 639, 52 Am. St. Rep. 201, 44 Pac. 319; Gould v. Eaton, 117 Cal. 539, 47 Pac. 577, 38 L. R. A. 181; Barker v. Gould, 122 Cal. 240, 58 Pac. 845.

53 See Platte etc. Co. v. Buckers etc. Co., 25 Colo. 77, 3 Pac. 334.

54 Whitmore v. Utah etc. Co., 27 Utah, 284, 73 Pac. 764.

55 Vineland etc. Co. v. Azusa etc. Co., 126 Cal. 486, 58 Pac. 1057, 46 L. R. A. 820.

56 *Supra*, and Montecito v. Santa Barbara, 144 Cal. 578, 77 Pac. 1113.

57 Vineland etc. Co. v. Azusa etc. Co., 126 Cal. 486, 58 Pac. 1057, 46 L. R. A. 820; McClintock v. Hudson, 141 Cal. 275, 74 Pac. 849; Montecito v. Santa Barbara, 144 Cal. 578, 77 Pac. 1113.

58 Montecito v. Santa Barbara, 144 Cal. 578, at 588, 77 Pac. 1113.

59 124 Cal. 630, 57 Pac. 585.

the stream, it cannot be diverted, whether it would come to the surface or not. It belongs to the stream and must flow on to the lower riparian proprietor. His right to the sub-surface portion of the stream is identical with his right to the surface flow, and is entitled to the same protection."

In Vineland etc. Co. v. Azusa etc. Co.[60] the appropriation of the sub-flow by means of a tunnel was upheld against later claimants; and there was a *dictum* to the same effect in Roberts v. Krafts, 141 Cal. 20, 74 Pac. 281.[61] The facts in the Vineland case are worth stating.

The stream in question was the San Gabriel River, where it flows over government land. There were three sets of claimants to the water: First, those who had appropriated all the surface flow; then an irrigation company, who posted an appropriation notice and began work on a tunnel for developing water, and who continued the work on the tunnel later under compromise agreement with the surface owners; finally an irrigation district which began another tunnel on the opposite bank, and finished it first. The tunnel of the company was upheld against that of the district—chiefly because the surface claimants had agreed to it and had not agreed to the district's tunnel; partly also, because the company's tunnel, having been started with a notice prior to the district's tunnel, was, as between the two, prior in time by relation, though completed later than the other one.[61a]

On the other hand, an attempt to appropriate the sub-flow of a stream by means of a tunnel was held invalid

60 126 Cal. 486, 58 Pac. 1057, 46 L. R. A. 820.

61 It was also upheld in Whitemore v. Utah etc. Co., 27 Utah, 284, 73 Pac. 764.

61a The notice posted is set forth in Appendix C, page 413.

in the very recent case of Montecito Water Co. v. Santa Barbara,[62] there being prior appropriators whose use of the stream would have been interfered with.[63] It was pointed out in these cases that it is a difficult matter to prove just how much a seepage tunnel interferes with and taps a stream, since water must have seeped into the tunnel from all directions; but this was held to be a question of fact, to be determined in the ordinary way; and the seepage tunnel will be unlawful to the extent that it is shown to be tapping the surface stream of the prior claimant.[64]

§ 77. **Percolating Water.**—The third class of underground water is water percolating underground, diffused, and not a part of the flow in any definite channel. In Vineland etc. Co. v. Azusa etc. Co.[65] it is said that percolating water is a phrase of well-defined meaning within the law, adding: "It is essential to the nature of percolating waters that they do not form part of the body or flow, surface or subterranean, of any stream. They may either be rain waters which are slowly infiltering through the soil, or they may be waters seeping through the banks or bed of a stream which have so far left the bed and the other waters as to have lost their character as part of the flow."[66]

The law in this wide class of underground water may be said to be now in the making in the West both as

62 144 Cal. 573, 77 Pac. 1113.

63 Accord Los Angeles v. Pomeroy, 124 Cal. 597, 57 Pac. 585; Santa Barbara v. Gould, 143 Cal. 421, 77 Pac. 151.

64 See, also, Howcroft v. Union etc. Co., 25 Utah, 311, 71 Pac. 487; Whitmore v. Utah etc. Co., 26 Utah, 488, 73 Pac. 764; Bunkers etc. Co. v. Farmers' etc. Co., 31 Colo. 62, 72 Pac. 49, in general accord. See, also, Kansas v. Colorado, 185 U. S. 125, at 147, 22 Sup. Ct. Rep. 552, 46 L. ed. 838.

65 126 Cal. 486, 58 Pac. 1057.

66 See the long note in 67 Am. St. Rep. 663.

respects appropriation and as respects riparian rights, if that term may be applied to this new subject. There have been seven cases in the California supreme court dealing with or discussing percolating water within the last two years. In this place it is enough to say that it seems well established that percolating water is subject to appropriation.

§ 78. **Percolating Water may be Appropriated.**—There are two decisions directly in point. In Cohen v. La Canada Water Co.[67] there were some springs on vacant public land. The plaintiff drove pipes into the rocks at the springs and piped off the water. Later the defendant came and drove tunnels near by, causing the water to cease flowing in the pipes; and judgment was given against him for doing this. We have already seen that spring water, when gathered in a watercourse flowing from the spring, can be appropriated.[68] But this case went much further, and upheld the appropriation of the percolations feeding the spring, while still underground.[69] Formerly it had been decided exactly *contra;* the appropriator could follow the water to the very mouth of the spring,[70] but not further.[71] The other decision directly in point is McClintock v. Hudson,[72] holding that the general underground seepage down the hillsides, toward an appropriated stream, was appropriated with the stream as an incident. A tunnel driven near the source of a stream greatly decreased its flow. This was held unlawful, even assuming that the tunnel

67 142 Cal. 437, 76 Pac. 47.

68 *Supra,* sec. 64.

69 Compare Strait v. Brown, 16 Nev. 317.

70 Ely v. Ferguson, 91 Cal. 187, 27 Pac. 587.

71 Hanson v. McCue, 42 Cal. 303, 10 Am. Rep. 299; Huston v. Leach, 53 Cal. 262; Southern Pac. Ry. v. Dufour, 95 Cal. 615, 30 Pac. 873, 19 L. R. A. 92.

72 141 Cal. 275, 74 Pac. 849.

was too high up to affect that part of the stream called the sub-flow. This case directly holds that the oncoming percolating water may be appropriated, and is appropriated when the stream is appropriated.

Beside these two cases directly in point, the leading case of Katz v. Walkinshaw,[73] in which the whole new doctrine of percolating water has its foundation, contains strong *dicta* that in a proper case it will be held that a well may constitute an appropriation of the percolating water necessary to supply it. Nevertheless it should be noted that Katz v. Walkinshaw dealt on its facts only with the rights of landowners to percolating water (similar to riparian rights on streams), and what is said concerning appropriation is only *dictum*, though likely to have great influence.[74]

These cases apply to percolating water the rule of priority as in the case of other appropriations. Prior claimants to the percolating water, either as appropriators or as occupants of overlying land, must be protected first, and consequently an appropriation thereof will seldom be possible except in the most sparsely settled neighborhoods, where large regions are still unoccupied public land.[75]

§ 79. **Underground Reservoir.**—How far the California court, in applying the principle of Katz v. Walkinshaw, will depart from the facts of that case, it is too early now to say, though the two decisions above mentioned seem to go a great way. On its facts it dealt with a

73 141 Cal. 116, 99 Am. St. Rep. 35, 70 Pac. 663, 74 Pac. 766.

74 "The right is unquestioned, and plaintiff itself nowhere disputed the right of these defendants to drive their tunnels, to develop, take, and use any waters they may thus find": Montecito etc. Co. v. Santa Barbara, 144 Cal. 578, 77 Pac. 1113.

75 See especially Katz v. Walkinshaw, 141 Cal. 116, 99 Am. St. Rep. 35, 70 Pac. 663, 74 Pac. 766.

case where there was an underground catchment basin composed of pebbles, loose and porous material, in which the water was proved to have gathered as in an underground reservoir.[76] This same point is again noticed in Montecito etc. Co. v. Santa Barbara saying:[77]

"In Katz v. Walkinshaw the condition presented was that of a well-defined underground catchment basin, a subterranean lake, so to speak, loosely filled with gravels." The existence of a similar reservoir was previously recognized in Los Angeles v. Pomeroy,[78] where it is described as follows:

"The land is found to be saturated with water to within a few feet of the surface. It is proposed to construct a sub-surface dam at the lower end of the tract. A sub-surface dam, of course, would not have the effect of flooding the surface permanently, but it would permanently raise the plane of saturation. This being done, it is next proposed to tap this heavily saturated bed of sand and gravel by means of a tunnel connected with lateral galleries through which the water will be drained off and conducted to supply the pipes. In other words, the land is to be used as a reservoir, such as essentially it is, and none the less so because the water does not rise and stand above the surface. The evidence in the case shows that from one-fifth to one-third of the entire bulk of the material filling the valley below the plane of saturation is water. The land in its natural state, therefore, is a reservoir, and a sub-surface dam is to be constructed in order to make it better serve the purposes of a reservoir." And held that such a reservoir was a well-defined entity that could be taken as a whole in eminent domain proceedings. There is a hint

76 141 Cal., at page 126.
77 144 Cal. 578, at 584, 77 Pac. 1113.
78 124 Cal. 597, at page 616, 57 Pac. 585.

in Katz v. Walkinshaw that rights in percolating water will be limited to that kind only. At page 126 the court, in Katz v. Walkinshaw, says:

"The geological history and formation of the country is peculiar. Deep borings have shown that almost all of the valleys and other places where water is found abundantly in percolation were formerly deep canyons or basins, at the bottoms of which anciently there were surface streams or lakes. Gravel, boulders, and occasionally pieces of driftwood have been found near the coast far below tide level, showing that these sunken stream-beds were once high enough to discharge water by gravity into the sea. These valleys and basins are bordered by high mountains, upon which there falls the more abundant rain. The deep canyons or basins in course of ages have become filled with the washings from the mountains, largely composed of sand and gravel, and into this porous material the water now running down from the mountains rapidly sinks and slowly moves through the lands by the process usually termed percolation, forming what are practically underground reservoirs. It is the water thus held or stored that is now being taken to eke out the supply from the natural streams. In almost every instance of a water supply from the so-called percolating water, the location of the well or tunnel by which it is collected is in one of these ancient canyons or lake basins. Outside of these there is no percolating water in sufficient quantity to be of much importance in the development of the country or of sufficient value to cause serious litigation."

If that is the result, the new rule would be merely the recognition of subterranean bodies similar to lakes or ponds, and merely an extension of the principle on which definite underground streams have long been recognized. It would be far from establishing a new rule

applying to percolating ground water in general. But the tendency of the later decisions, and the entire trend of the *dicta*, are against adopting this limitation, and the rule was applied to percolations supplying a spring, and these seeping down a watershed toward a stream, though no such underground reservoir or definite collection of water was shown.[79] For our present purpose we conclude that the rule is that percolating water of all kinds may be appropriated whatever the natural conditions governing its percolation.[80]

§ 80. **Effect of the New Rule.**—This treatment of percolating water is entirely novel. In the old law[81] no rights whatever were recognized in diffused percolating water as a separate thing; it was regarded as a mere ingredient of the soil—one of the constituents of the soil—just as feldspar and mica are constituents of granite. The man who owned water-soaked soil had a right to do with it what he wanted, and he could dig out the soil, carrying the water with it, or he could leave the soil and take out only the water; and to look into any change resulting in the constituents of his neighbor's soil was deemed beyond the province of the law. So long as the percolating water stayed in the soil, the owner of the soil could take it, and take all that came there; likewise his neighbor, who could hence drain it all away. It was not recognized as a thing to which any definite value could be given.[82] This old rule of diffused underground water is somewhat like the law of diffused surface water, already mentioned; both were

79 *Supra*, sec. 78.

80 In Kansas there is a statute providing that subterranean water standing in subterranean sheets or lakes may be appropriated, as well as subterranean streams: Kan. Gen. Stats. 1901, sec. 3523.

81 See cases collected in 64 Am. Dec. 727, note, and text-books.

82 Los Angeles v. Pomeroy, 124 Cal. 597, 57 Pac. 585.

too uncertain in their movements to found any right upon, distinct in itself. It still remains the rule in California as to diffused surface water. Until the case of Katz v. Walkinshaw,[83] three years ago, it was thought firmly established by several decisions as the law of percolating water also,[84] but the new cases have now established the new rule; at least in California.

These older cases are all distinguished, in Katz v. Walkinshaw, on one ground or another, the court disclaiming to overrule any; but the grounds of distinction are not convincing nor strongly insisted upon in later cases. There had, however, been various *dicta* against the old rule, as will be noted hereafter.

This new rule was fixed purely out of public policy. The old rule was unsuited to conditions in California at large, where, with its large extent of arid land, the widest prosperity depends on putting the land under cultivation by making the underground water serve the largest number of people, and lands and uses. It is a rule grounded on public policy, but the interests of the agriculturists carried the determination of that policy. More especially, agriculturists in the arid South, though the court has always disclaimed making a separate rule for separate parts of the State.[85] The importance of it to the miner and others lies in the fact that mines and excavations are likely to drain wells and springs and the sub-flow of streams in the neighborhood. Will the miner be held liable for taking water that belongs to another? It will be proper to consider that again later.[86]

83 141 Cal. 116, 99 Am. St. Rep. 35, 70 Pac. 663, 74 Pac. 766.

84 E. g., Hanson v. McCue, 42 Cal. 303, 10 Am. Rep. 299; Cross v. Kitts, 69 Cal. 217, 58 Am. Rep. 558, 10 Pac. 409; Gould v. Eaton, 111 Cal. 639, 52 Am. St. Rep. 201, 44 Pac. 319; Vineland v. Azusa etc. Co., 126 Cal. 486, 58 Pac. 1057, 46 L. R. A. 820.

85 See Lux v. Haggin, 69 Cal. 255, at 311, 10 Pac. 674.

86 *Infra*, sec. 157 et seq.

It is enough here to point out that underground water, whether in a defined stream, seeping from a surface stream, or percolating diffused unconnected with any stream, in California, may be appropriated for use under the law of appropriation.

CHAPTER VI.

HOW AN APPROPRIATION IS MADE—IN CALIFORNIA AND STATES THAT HAVE NOT ADOPTED IRRIGATION CODES.

§ 81. Introductory.
§ 82. Origin of this method.
§ 83. Ownership of land not needed.

A. BY ACTUAL DIVERSION.

§ 84. Distinguished from the Civil Code method.
§ 85. The Civil Code does not apply.
§ 86. Examples.
§ 87. Mere settlement on land not enough.

B. TO SECURE THE BENEFIT OF RELATION.

§ 88. Object of Civil Code provisions.
§ 89. Civil Code provisions chiefly declaratory only.

C. NOTICE.

§ 90. Form of notice.
§ 91. Purpose of notice.
§ 92. The notice operates as a warning.
§ 93. Failure to post notice.
§ 94. Notice alone not enough.
§ 95. Notice in appropriating underground water.

D. BENEFICIAL PURPOSE.

§ 96. What constitutes a beneficial purpose.
§ 97. Motive.
§ 98. Evidence of intention.
§ 99. Intention alone not enough.

E. DILIGENCE.

§ 100. Must be diligence in prosecuting construction work.
§ 101. What constitutes diligence.
§ 102. Failure to use diligence.

F. COMPLETION OF CONSTRUCTION WORK.

§ 103. Completion of work.
§ 104. What amounts to completion.
§ 105. Mere diversion.
§ 106. Changes in course of construction.

G. RELATING BACK.

§ 107. Origin of the doctrine.
§ 108. Effect of relation.
§ 109. Actual application.
§ 110. Recapitulation.

§ 81. Using the California Civil Code as a model for legislation and, consequently (as the California code is chiefly only declaratory of the early decision), basing their method on the early California cases, the following method is generally applicable, also in Washington,[1] Montana[2] and Kansas.[3] This method was formerly followed throughout the West in the absence of statute.[4] In Nevada[5] and Utah[6] statutes formerly applied a similar method of appropriating, but the statutes of 1903 and 1905[7] adopted the recent and more elaborate statutory method described in the next chapter. In Oregon[8] the law formerly resembled the California method. A more enlarged treatment of the matter, still based on the California method, was provided later.[9] But in 1905[10] a system modeled rather after the new statutory method of the arid States was adopted.

1 Ballinger's Codes 1897, sec. 4092.
2 Civ. Code 1895, secs. 1880-1892; Amended Stats. 1901, p. 152.
3 Gen. Stats. 1901, secs. 3609-3613.
4 Superseded now by the irrigation code method (chapter VII).
5 Comp. Laws, 1900, 356 et seq., 424.
6 Rev. Stats. 1898, secs. 1261-1275.
7 See next chapter and Appendix.
8 Hill's Ann. Laws, p. 1930, secs. 1-9.
9 Stats. 1899, p. 172, Am. 1901, p. 136, 1903 (Sp. Sess.), p. 25.
10 Stats. 1905, p. 401.

The method described in this chapter might be called the original method; and that in the next chapter, the new method.

§ 82. **Origin of this Method.**—Having found water that can be appropriated and a proper place to appropriate it, the right to the water is not complete until the water is actually taken into one's possession, or rather, until all work preparatory to the actual use of the water is completed, since that is the equivalent of taking possession; it is the nearest to possession that the nature of the right makes possible.[11]

The rules developed in the early days in California, but the rules still prevail in California substantially as laid down in the early decisions of the court. The proposition around which these rules center is, it should be repeated, that the requisites are those furnishing an equivalent to taking possession of the water, the right being a possessory right.

§ 83. **Ownership of Land not Needed.**—It has previously been pointed out that there are no personal requisites concerning the appropriator. It is immaterial whether he is an alien, minor, riparian proprietor, etc.[12] It will be well to repeat here that ownership of any land is not a requisite either; the appropriator need not locate any land.[13] That is a distinguishing feature of the law of appropriation. Water may be appropriated for use any place by anyone, and often is diverted by companies who own no land, to supply distant people.

11 Conger v. Weaver, 6 Cal. 548, 65 Am. Dec. 528 (quoted *infra*, sec. 107); Thompson v. Lee, 8 Cal. 275.

12 *Ante*, sec. 48.

13 *Ante*, sec. 42.

A. BY ACTUAL DIVERSION.

§ 84. **Distinguished from the Civil Code Method.**—An appropriation may be made by a completed actual diversion and use (without following the Civil Code) or else by proceeding under the Civil Code. The difference is that in the latter case the appropriator can claim the benefit of the doctrine of relation, while in the former he cannot. The difference, however, existed from the earliest times, and the Civil Code merely fixed the details of the method by which an appropriator could secure the benefit of the doctrine of relation.[14]

These two are the only methods. Unless there is a right by actual diversion as below set forth, or by compliance with the Civil Code, it cannot be spoken of as an appropriation.[15] There can be no such thing as a constructive appropriation, resting, as the matter does, so largely upon actual intent.[16] There can be no appropriation by prescription, as an appropriation is an original acquisition from the United States, against whom the statute of limitations does not run.[17] This rule precludes an appropriation improperly made, but continued for five years, from being of any force, the land having been public land part of that time.[18]

§ 85. **The Civil Code does not Apply.**—Where one does not seek the benefit of the doctrine of relation[19] and actually completes his construction work, and diverts and

14 De Necochea v. Curtis, 80 Cal. 397, 20 Pac. 563, 22 Pac. 198; Wells v. Mantes, 99 Cal. 583, 34 Pac. 324.

15 Senior v. Anderson, 115 Cal. 496, at 505, 47 Pac. 454.

16 Kelly v. Natoma etc. Co., 6 Cal. 105.

17 Matthews v. Ferrera, 45 Cal. 51; Wilkins v. McCue, 46 Cal. 656; Jatunn v. Smith, 95 Cal. 154, 30 Pac. 200; Smith v. Hawkins, 110 Cal. 122, 42 Pac. 453.

18 Ibid.

19 *Infra*, sec. 88 et seq.

uses the water before others intervene, his claim as an appropriator is perfectly valid, and always has been. An appropriation is merely the acquisition of a right from the government. If there are rival claimants, the government demands compliance with the code formalities; but if there are no rival claimants, the government is alone concerned, and acquiesces, because such was the rule under the early customs. As between the government and the appropriator there are only two requisites for this—the actual diversion and use of the water and that the use is for a beneficial purpose. If there are no rival claimants of any kind, up to such actual use, that is enough to satisfy the government, who is then alone concerned, and the right is complete against later attack on this ground.[20] The head-note to Wells v. Mantes, *supra* (the leading case), sums up the decision as follows:

"The scope and purpose of the provisions of the Civil Code upon water rights was merely to establish a procedure for the claimants of the right to the use of the water whereby a certain definite time might be established as the date at which their title should accrue by relation; and a failure to comply with the rules there laid down does not deprive an appropriator by actual diversion of the right to the use of the water as against a subsequent claimant who complies therewith."

The decision was that section 1419 of the Civil Code providing for forfeiture for non-compliance with the code formalities does not apply to such a case, the court saying:

20 Mitchell v. Canal Co., 75 Cal. 464, 17 Pac. 246; Wells v. Mantes, 99 Cal. 583, 34 Pac. 324; De Necochea v. Curtis, 80 Cal. 397, 20 Pac. 563, 22 Pac. 598; Burrows v. Burrows, 82 Cal. 564, 23 Pac. 146; Watterson v. Saldunbehere, 101 Cal. 107, 35 Pac. 432; Taylor v. Abbott, 103 Cal. 421, 37 Pac. 408; Senior v. Anderson, 115 Cal. 496, 47 Pac. 454.

"To defeat the respondent's rights, appellants invoke section 1419 of the Civil Code, which reads: 'A failure to comply with such rules deprives the claimants of the right to the use of the water as against a subsequent claimant who complies therewith.' We think this provision does not refer to an appropriator by actual diversion, but only to claimants seeking the right to the use of water under the provisions of this chapter of the code. This is made apparent by an examination of the preceding sections. Section 1415 provides: 'A person desiring to appropriate water must post a notice, in writing, in a conspicuous place at the point of intended diversion, stating therein; that he claims the water there flowing to the extent,' etc. Section 1416 reads: 'Within sixty days after the notice is posted the claimant must commence the excavation or construction of the work, etc.' Section 1418 reads: 'By a compliance with the above rules the claimant's right to the use of the water relates back to the time the notice was posted.' It thus becomes apparent from these provisions that the word 'claimants' as used in section 1419 refers to a party posting and recording the notices required by the provisions of section 1415, and does not apply to an appropriator by actual diversion."[21]

In Montana, where the code provisions are copied from those of California, the Montana court says[22] (after quoting from De Necochea v. Curtis and Wells v. Mantes, *supra*): "We think the construction of the statute by the supreme court of California is logical and correct, and are of the opinion that the Montana act should be construed in the same manner."

§ 86. **Examples.**—One who had long been using water as an appropriator was protected in De Necochea v.

21 See 60 Am. St. Rep. 800, note.

22 In Murray v. Tingley, 20 Mont. 260, 50 Pac. 724.

Curtis[23] (the pioneer case) against a later occupant claiming as a riparian owner, though the appropriator had not complied with the formalities required by the code.[24] In Wells v. Mantes,[25] he was likewise protected against a later appropriator who did comply with the code. In Utt v. Frey[26] the appropriator died, and his son-in-law entered and took possession without any formal transfer. The latter's right was upheld as a new appropriation by actual diversion and use. In Griseza v. Terwilliger[27] it was held that a transferee under a parol sale of the water right takes no title by virtue of the sale, because of the statute of frauds, but if he actually takes possession and uses the water, he has a good title as a new appropriator by actual diversion, though the code formalities were not performed.

§ 87. **Mere Settlement on Banks of Stream not Enough.**— Merely settling on the banks of a stream does not constitute an appropriation of the water thereof, however. Aside from the question of riparian rights elsewhere considered, the settlement does not *per se* give any right to the water.[28] In Walsh v. Wallace, cited *supra,* the land was settled upon for agricultural purposes, but the water was not diverted, and as riparian rights are not recognized in Nevada, the settler was held to have no right to the water. In Robinson v. Imperial etc. Co., cited *supra,* the land was taken up for a millsite and the court said: "The digging of a ditch on public land is

23 80 Cal. 397, 20 Pac. 563, 22 Pac. 198.

24 Affirmed in Burrows v. Burrows, 82 Cal. 564, 23 Pac. 146.

25 99 Cal. 583, 34 Pac. 324.

26 106 Cal. 392, 39 Pac. 807.

27 144 Cal. 456, 77 Pac. 1034; *infra*, secs. 123, 188.

28 Walsh v. Wallace, 26 Nev. 299, 99 Am. St. Rep. 692, 67 Pac. 914; Leggat v. Carroll (Mont.), 76 Pac. 805; Robinson v. Imperial etc. Co., 5 Nev. 44.

not an appropriation of the land for a millsite, nor is the mere appropriation of a millsite an appropriation of water for purposes of milling." "It would be as absurd to say that the digging of a ditch is an appropriation of land sufficient for a millsite, as to say that to appropriate a millsite would be an appropriation of water for milling purposes." In Leggat v. Carroll, cited *supra,* it was held that the location of a placer mining claim is not an appropriation of the water in the stream.

In Schwab v. Beam,[29] Judge Hallett did hold that the location of a placer claim gave a right to the water thereon. The court used the following words: "Nothing in the constitution of this State or in the law relating to irrigation in any way modifies or changes the rules of the common law in respect to the diversion of streams for manufacturing, mining or mechanical purposes. In Colorado, as elsewhere in the United States, the law is now as it has been at all times, that for such purposes each riparian owner may use the waters of running streams on his own premises, allowing such waters to go down to subsequent owners in their natural channel."

This seems to show that the decision rested not on the principles of appropriation, but on those of riparian rights. The placer claimant under the California doctrine has a right to the water in that way[30] but not by appropriation. Schwab v. Beam would seem to be an attempt to apply the California doctrine in Colorado, a position which the State court repudiates.[31] The case has been criticised.[32]

29 86 Fed. 41 (C. C. Colo.).

30 Crandall v. Woods, 8 Cal. 136.

31 *Supra,* secs. 19, 25.

32 Morrison's Mining Rights, p. 180, saying: "This is an extreme holding on what seems to us a very doubtful position."

B. TO SECURE THE BENEFIT OF RELATION.

§ 88. **Object of Civil Code Provisions.**—The early customs out of which the law of appropriation grew were based (as has been already discussed) on the principle that rights on the public domain were open to all, the first possessor being protected; and that all, also, should have an equal chance. As is said in Nevada etc. Co. v. Kidd,[33] they did not countenance anyone acting like "the dog in the manger." Many attempted to secure a monopoly of waters by merely posting notices or making a pretense at building canals, ditches, etc., and tried by this means to hold a right to the water against later comers who *bona fide* sought to construct the necessary works for its use. From those conditions grew up a method of making an appropriation to apply specially to rival claimants while the construction work, often prolonged, was going on. If the first comer *bona fide* and diligently prosecuted his work, his right on its completion related back to the very beginning of it;[34] otherwise the others were preferred. This method of making the appropriation was under the early decisions substantially the same as that now provided, for this purpose, in the Civil Code of California.[35] The provisions of the Civil Code of California are merely to fix the procedure whereby a certain definite time might be established as the date at which title should accrue by relation.[36]

§ 89. **Civil Code Provisions Chiefly Declaratory Only.**—In codifying the rules governing this method in California, the rules laid down in the decisions of the court were not

33 37 Cal. 282.

34 Conger v. Weaver, 6 Cal. 548, 65 Am. Dec. 528; Nevada etc. Co. v. Kidd, 37 Cal. 282.

35 Secs. 1410-1422.

36 De Necochea v. Curtis, 80 Cal. 397, 20 Pac. 563, 22 Pac. 198; Wells v. Mantes, 99 Cal. 583, 34 Pac. 324.

materially changed; for the whole code upon this subject is substantially only declaratory of the pre-existing law.[37] The innovations consist in the following:

A notice expressing certain details in writing is required.[38] Before the code, notice was a requisite, but it did not have to be a written notice,[39] nor, consequently, did it have to express the present required details. Acts such as would put a man on inquiry—some unequivocal outward act such as making a preliminary survey—were notice enough.[40] It became customary, however, to post a written notice, even before the code.[41]

The other point was where the code specifies that work must be begun within sixty days after posting a notice,[42] whereas before the code it was a question to be decided by the jury whether the delay was unreasonable and no number of days was fixed.[43]

There are four requisites in all that must be complied with, to secure the benefit of the doctrine of relation, under the California method, and the statutes of other States based thereon, viz.: First, a notice must be posted at the start; second, there must be an intention to apply the water to a beneficial purpose; third, the work must be prosecuted with diligence; fourth, it must be actually completed.

37 De Necochea v. Curtis, 80 Cal. 397, 20 Pac. 563, 22 Pac. 198; Wells v. Mantes, 99 Cal. 583, 34 Pac. 324; Pomeroy on Riparian Rights, sec. 96; Blanchard and Weeks on Mining Claims and Water Rights, p. 696; Kinney on Irrigation, sec. 351.

38 Cal. Civ. Code, 1415.

39 De Necochea v. Curtis, 80 Cal. 397, at 406, 20 Pac. 563, 22 Pac. 198.

40 Parke v. Kilham, 8 Cal. 77, 68 Am. Dec. 310; Kimball v. Gearhart, 12 Cal. 27.

41 See Weaver v. Eureka etc. Co., 15 Cal. 271; and statement of reporter, in Titcomb v. Kirk, 51 Cal. 288.

42 Cal. Civ. Code, 1419.

43 *Infra*, sec. 100 et seq.

C. NOTICE.

§ 90. **Form of Notice.**—In the California Civil Code, sections 1415, 1421, it is provided that a notice must be posted at the point of intended diversion, stating the amount and purpose and place and means of use, and be recorded within ten days. Section 1415 is as follows:

"NOTICE OF APPROPRIATION.—A person desiring to appropriate water must post a notice, in writing, in a conspicuous place at the point of intended diversion, stating therein:

"1. That he claims the water there flowing to the extent of (giving the number) inches measured under a 4-inch pressure;

"2. The purposes for which he claims it, and the place of intended use;

"3. The means by which he intends to divert it, and the size of the flume, ditch, pipe, or aqueduct in which he intends to divert it. A copy of the notice must, within ten days after it is posted, be recorded in the office of the recorder of the county in which it is posted.

"After filing such copy for record, the place of intended diversion or the place of intended use or the means by which it is intended to divert the water, may be changed by the person posting said notice or his assigns if others are not injured by such change. This provision applies to notices already filed as well as to notices hereafter filed."[44]

What constitutes an inch of water varies in different localities.[45]

[44] En. March 21, 1872; Amd. 1903, 361.

[45] Dougherty v. Haggin, 56 Cal. 522. "The term 'miner's inch' is more or less indefinite, for the reason that California water companies do not all use the same head above the center of the aperture.

§ 91. **Purpose of the Notice.**—The notice is chiefly to fix the date at which the appropriator's title, on completion, shall accrue by relation,[46] or, as it is said, the right on completion relates back to the posting of the notice.[47] All comers who date their claim later than that must relinquish their claim so far as inconsistent therewith, whether the later comer is himself an appropriator,[48] or an occupant claiming riparian rights.[49]

The other purpose of the notice is to set a limit upon the extent of the water right claimed,[50] and to preserve evidence thereof by having it recorded.[51]

How far an appropriator is bound by the declaration in his notice as to amount, purpose, means or place of use will be a matter for consideration later. It

and the inch varies from 1.36 to 1.73 cubic feet per minute each; but the most common measurement is through an aperture two inches high and whatever length is required, and through a plank 1½ inches thick. The lower edge of the aperture should be 2 inches above the bottom of the measuring box and the plank 5 inches high above the aperture, thus making a 6-inch head above the center of the stream. Each square inch of this opening represents a miner's inch, which is equal to a flow of 1½ cubic feet per minute'': Kent's Mechanical Engineer's Pocket Book, p. 18.

The question from a legal point of view would seem to be settled by the California Statute of 1901, page 600, as follows:

''Section 1. The standard miner's inch of water shall be equivalent or equal to one and one-half cubic feet of water per minute, measured through any aperture or orifice.

''Sec. 2. All acts or parts of acts inconsistent with the provisions of this act are hereby repealed.'' A similar statute exists in Montana: Stats. 1899, p. 117. And see *infra*, sec. 117.

46 Wells v. Mantes, 99 Cal. 583, 34 Pac. 324.

47 California Civ. Code, 1418; Kimball v. Gearhart, 12 Cal. 27; Nevada etc. Co. v. Kidd, 37 Cal. 282; Wells v. Mantes, 99 Cal. 583, 34 Pac. 324.

48 Cal. Civ. Code, 1418, 1414, and cases *supra*.

49 De Necochea v. Curtis, 80 Cal. 397, 20 Pac. 563, 22 Pac. 198; Broder v. Natoma Water Co., 101 U. S. 274, 25 L. ed. 790; Nevada etc. Co. v. Kidd, 37 Cal. 282.

50 *Infra*, sec. 130.

51 Murray v. Tingley, 20 Mont. 260, 50 Pac. 724.

may be said here that the appropriator is not bound by his notice to a preliminary base line for ditches or flumes, but may later, in the course of construction, within a reasonable time, change his surveyed line, as necessity points out, without having to start and post a notice all over again.[52] The notice is to be liberally construed.[53]

§ 92. **The Notice Operates as a Warning.**—The notice does not withdraw the water then and there from use by others entirely as a notice of discovery withdraws mining ground, but it warns others that later on, when you have completed your works, you will have the right to so much water. It has been held that, in the meantime, anyone can come in temporarily and use the water, and you will have no action against him unless he interferes with your construction work or continues to use the water after you have actually completed your works. Until that time you have no action for his diverting the water.[54] In Nevada Water Co. v. Kidd,[55] the court says:

"In view of this principle, suppose by way of illustration that the plaintiff has located its site for a dam and canal and claimed the waters of the South Yuba River and commenced the construction of the dam and canal, but in consequence of the magnitude of the work, was unable for several years to divert or use the water, and in the meantime the defendants, being men of greater pecuniary ability, should consequently locate another claim above or near the plaintiff's and a canal running parallel with the plaintiff's and be in a condi-

52 Cal. Civ. Code, 1415; Conger v. Weaver, 6 Cal. 548, 65 Am. Dec. 528.

53 Osgood v. El Dorado etc. Co., 56 Cal. 571.

54 *Ante*, sec. 31.

55 37 Cal. 282.

tion to divert and use the water in half the time; their acts, provided there was no interference with plaintiff's site and location, or obstruction to the prosecution of its work, would be no injury to plaintiff or cause of action in its favor. The plaintiff in such case has, as yet, no right to the water so far perfected that a diversion or use by other parties is any interference or injury. But if the plaintiff's work should be prosecuted with diligence and completed, so as to entitle it to divert and use the waters, its right to the waters thenceforth would date by relation from the commencement of the work, and, should defendants thereafter continue to divert the waters and deprive the plaintiff of their use, an injury to their water rights then vested and perfected would result, and a right of action for the injury to such right accrue." The case so held.[56]

The case was quoted and affirmed on this point in Salt Lake City v. Salt Lake etc. Co.[57] In Rincon etc. Co. v. Anaheim etc. Co.[58] this principle was affirmed by the Federal court, the court saying:

"It is obvious that a person who intends to become an appropriator under these sections cannot acquire the exclusive right to the use of the water he intends appropriating, nor maintain any suit, either at law or in equity for its diversion, until all the steps requisite to an appropriation have been made."

In Woolman v. Garringer,[59] affirming the same point, the court says that the appropriator need take no notice of intervening claimants who make temporary appropriations in the meantime.

During the prosecution of the construction work the

56 See Pomeroy on Riparian Rights, sec. 53.

57 24 Utah, 249, 67 Pac. 672, 61 L. R. A. 648.

58 C. C. S. Dist. Cal., 115 Fed. 43.

59 1 Mont. 535.

right does exist to use so much of the water as is necessary in the construction work, to keep the ditch or flume, etc., in repair,[60] but that is all. For all purposes except to make the temporary use of the water by others actionable, however, the right to the use of water on completion relates back to the posting of the notice, if the work has been prosecuted diligently, and dates from the posting of the notice as against those who come later.[61]

§ 93. **Failure to Post Notice.**—The failure to post a notice, or the posting of a faulty notice,[62] constitutes a waiver of all advantages that such a warning gives. As seen above, it is not fatal if the work is nevertheless completed before others intervene, and the appropriator may claim as an appropriator by actual diversion.[63] As between rival claimants, neither of whom has posted a notice, probably the result will be the same, giving the better right to the first who actually diverts and uses the water.[64] It may be, however, that they will be on the same footing as rivals before the code (when written notice was not needed),[65] on the ground that the code provisions were enacted for their benefit, and they, refusing to take advantage of them, waived them. In this view, the better right would, by relation, be in him who began first in a way that gave notice from his acts, provided he prosecuted the work with diligence.[66] The

60 Weaver v. Conger, 10 Cal. 233.

61 Cal. Civ. Code, 1414, 1418; Maeris v. Bricknell, 7 Cal. 261, 68 Am. Dec. 257; Nevada etc. Co. v. Kidd, 37 Cal. 282; Wells v. Mantes, 99 Cal. 583, 34 Pac. 324.

62 Taylor v. Abbott, 103 Cal. 421.

63 Wells v. Mantes, 99 Cal. 583, 34 Pac. 324.

64 Compare Cordoza v. Calkins, 117 Cal. 106, 48 Pac. 1010.

65 *Ante*, sec. 89.

66 See 60 Am. St. Rep. 801, note; as, for example, in Maeris v. Bricknell, 7 Cal. 261, 68 Am. Dec. 257, and Kimball v. Gerhardt, 12 Cal. 27.

view of the code taken in De Necochea v. Curtis, and Wells v. Mantes, *supra*, however, would lead one to think that no claim to the benefit of the doctrine of relation can be made whatsoever, unless the code provisions are strictly complied with. And such was the result in the case of Murray v. Tingley.[67]

§ 94. **Notice Alone is not Enough.**—It need hardly be said that merely posting a notice is not enough unless the other requisites of a *bona fide* intent, diligence and completion, are also complied with.[68] It is well settled that the posting of a notice gives no rights if the other requisites are not complied with.

§ 95. **Notice in Appropriating Underground Water.**—As to underground water, it seems that the code provisions and the rules just stated apply, if it is in a definite stream, or sub-flow of a definite surface stream; the Civil Code governs all cases of definite streams, and a notice must, it seems, be posted on the surface to secure the benefit of the doctrine of relation.[69] But it is said in Katz v. Walkinshaw,[70] that the California code does not apply to mere diffused percolating water; and that the appropriation of this must be governed by the same principles as those which established the law of appropriation in the early days, before the code was enacted. It will be found, as we have seen, that the code, however, merely enacted the law substantially as it existed before, and that the requisites for the appropriation of percolating water will be substantially the same as

67 20 Mont. 260, 50 Pac. 724.

68 Thompson v. Lee, 8 Cal. 275; Cordoza v. Calkins, 117 Cal. 106, 48 Pac. 1010, and cases *passim*.

69 Vineland v. Azusa etc., 126 Cal. 486, 58 Pac. 1057, 46 L. R. A. 820. The notice posted in this case is given in the Appendix.

70 141 Cal. 116, 99 Am. St. Rep. 35, 70 Pac. 663, 74 Pac. 766.

those under the code for water in streams. An actual use for a beneficial purpose would be enough when the doctrine of relation is not invoked. To secure the benefit of the doctrine of relation there would have to be, if not a written notice, then acts that impart notice, intention to apply the percolating water to a beneficial purpose, diligence, and actual completion of the work, leaving out only the details as to notice, length of time, etc., fixed by the code.

In Katz v. Walkinshaw [71] the court says:

"The principles which, before the adoption of the Civil Code, were applied to protect appropriations and possessory rights in visible streams, will, in general, be found applicable to such appropriators of percolating waters either for public or private use, on distant lands, and will suffice for their protection as against other appropriators. Such rights are usufructuary only, and the first taker who with diligence puts the water in use will have the better right."

D. BENEFICIAL PURPOSE.

§ 96. **What Constitutes a Beneficial Purpose.**—There must be an intention to use the water for a beneficial purpose. This was a requisite from the earliest days, for all appropriations however made.[72]

In one case it is said: "He did not appropriate in a legal sense any water except such as he used beneficially—turning more water from a stream than he used was waste, not appropriation."[73]

[71] 141 Cal. 116, 99 Am. St. Rep. 35, 70 Pac. 663, 74 Pac. 766.

[72] See Pomeroy on Riparian Rights, sec. 47. Citing Dick v. Caldwell, 14 Nev. 167; Dick v. Bird, 14 Nev. 161; Crane v. Winsor, 2 Utah, 248; Monroe v. Ivie, 2 Utah, 535; Woolman v. Garringer, 1 Mont. 535. Cal. Civ. Code, sec. 1411.

[73] Dick v. Caldwell, 14 Nev. 167.

What constitutes a beneficial purpose will best be seen from examples. A ditch for mere drainage does not fulfill this requirement; another may hence go up stream and cut off the water.[74]

Cutting wild grass produced by the overflow of a river, that is, by the water of a river coming down and spreading over the land, is not an appropriation of that water within the meaning of that term.[75]

The following is an extreme case:

"The ground assumed is that the diversion of water for the mere temporary purpose of stranding fish is not converting it to a useful or profitable purpose, and therefore the party thus diverting it acquires no rights. Had the water been diverted by the Indians for the mere purpose of catching fish upon one occasion, this position might have been right. But, as I understand the testimony, it was a permanent diversion of the water, so as to run it over flat meadows, thus enabling the Indians at any time to catch fish among the grass of the meadow-land, which they could not catch whilst the waters were confined in a narrow channel. I cannot see but that it is just as legitimate for an Indian to turn water over meadow-lands to enable him to catch fish for his subsistence as for a white man to turn it over the same land to increase the growth of grass."[76]

Irrigation is a useful purpose and water may, of course, be appropriated for irrigation.[77]

74 Eddy v. Simpson, 3 Cal. 249, 58 Am. Dec. 408; Maeris v. Bricknell, 7 Cal. 261, 68 Am. Dec. 257.

75 Walsh v. Wallace, 26 Nev. 299, 99 Am. St. Rep. 692, 67 Pac. 914.

76 Lobdell v. Hall, 3 Nev. 507.

77 Rupley v. Welch, 23 Cal. 453 (approved in Natoma etc. v. Hancock, 101 Cal. 42, 31 Pac. 112, 35 Pac. 334); Cave v. Crafts, 53 Cal. 135; Anaheim etc. v. Semi-Tropic Co., 64 Cal. 185, 30 Pac. 623; Lux v. Haggin, 69 Cal. 255, 10 Pac. 674. See, also, Thorp v. Freed, 1 Mont. 651.

An appropriation for the sale of water is good.[78] The original case of Irwin v. Phillips[78a] was such a case. But mere speculation is not allowed; *e. g.*, a reservoir built to hold water indefinitely, without any definite use in mind.[79]

That all pursuits are on an equal footing, whether miners, agriculturists, manufacturers, etc., is a matter previously set forth. The following passage from Basey v. Gallagher, 87 U. S. 670, 22 L. ed. 452 (per Justice Stephen Field), is frequently quoted:

"Water is diverted to propel machinery in flour-mills, and sawmills, and to irrigate land for cultivation, as well as to enable miners to work their mining claims; and in all such cases the right of the first appropriator, exercised within reasonable limits, is respected and enforced."

§ 97. **Motive.**—Malice and ill-will toward another do not enter into the question.[80] It is usually said that an act otherwise lawful does not become unlawful merely through a malicious motive to injure another, though this wide statement is open to question. The question is more or less an open one, however, under the new decisions concerning underground water and in that connection will be discussed later.

§ 98. **Evidence of Intention.**—How is the intention shown? First, of course, from the notice; but it may

78 Yuba Co. v. Cloke, 79 Cal. 239, 21 Pac. 740; Senior v. Anderson, 130 Cal. 290, at 297, 62 Pac. 563; Souther v. San Diego etc., 112 Fed. 228; Cal. Const., art. 14, sec. 1. See note in 60 Am. St. Rep. 804, 816.

78a 5 Cal. 140, 63 Am. Dec. 113.

79 Weaver v. Eureka etc. Co., 15 Cal. 271.

80 Correa v. Frietas, 42 Cal. 339; Stone v. Bumpus, 46 Cal. 218; Fisher v. Feige, 137 Cal. 39, 92 Am. St. Rep. 77, 69 Pac. 618, 59 L. R. A. 333.

be drawn also from the appropriator's acts, the manner in which they work, the general size of the ditch, etc.[81] They aid in interpreting the notice.

§ 99. **Intention Alone not Enough.**—It need hardly be repeated that the intent alone, by itself, is not enough; the other requisites we are considering must also be complied with.[82] A design two years before to appropriate a certain creek as a connecting link in a long canal was held[83] not to prevent another man from coming in the meantime and building a dam. In extensive operations of this kind, involving several streams, each, it appears, must be separately appropriated.

E. DILIGENCE.

§ 100. **Must be Diligence in Prosecuting the Construction Work.**—This was a requisite from the earliest days for all appropriators claiming the benefit of the doctrine of relation.[84] It is likewise necessary under the California method,[85] and wherever the law of appropriation is in force, in States not following the California method, as well as the rest.

§ 101. **What Constitutes Diligence.**—The California code has specified that the work must commence within sixty days after posting of notice, and must continue thence diligently and uninterruptedly unless prevented by rain or snow.[86]

Interruptions, whether by sickness or lack of money,

81 White v. Todd's etc. Co., 8 Cal. 443, 68 Am. Dec. 338.
82 Ortman v. Dixon, 13 Cal. 33.
83 In Kelly v. Natoma etc. Co., 6 Cal. 105.
84 *Ante.*
85 Civ. Code, sec. 1416.
86 Civ. Code, sec. 1416.

are not allowed.[87] If a ditch breaks before the water reaches the land intended to be irrigated by it, the delay is not necessarily lack of diligence; it is open to explanation.[88]

The fact that another began later than you and finished sooner is evidence of lack of diligence on your part,[89] but is not conclusive.[90]

What constitutes diligence must be determined on the facts of each case. In Kimball v. Gearhart,[91] the court says that the following statements, among others, are an accurate statement of the law:

"In appropriating unclaimed water on public lands only such acts are necessary, and only such indications and evidences of appropriation are required as the nature of the case and the face of the country will admit of and are under the circumstances and at the time practicable; and surveys, notice, stakes and blazing of trees, followed by work and actual labor without any abandonment, will in every case where the work is completed, give title to water over subsequent claimants." "In determining the question of the plaintiff's diligence in the construction of their ditch, the jury have a right to take into consideration the circumstances surrounding them at the date of their alleged appropriation, such as the nature and climate of the country traversed by said ditch, together with all the difficulties of procuring labor and materials necessary in such cases."

Diligence does not require unusual or extraordinary

87 Kimball v. Gearhart, 12 Cal. 27; Nevada etc. Co. v. Kidd, 37 Cal. 282; Mitchell v. Amador Canal etc. Co., 75 Cal. 464, 17 Pac. 246.

88 Wells v. Kreyenhagen, 117 Cal. 329, 49 Pac. 128.

89 Nevada etc. Co. v. Kidd, 37 Cal. 282.

90 De Necochea v. Curtis, 80 Cal. 397, 20 Pac. 563, 22 Pac. 198; Wells v. Kreyenhagen, 117 Cal. 329, 49 Pac. 128.

91 12 Cal. 27.

efforts, but only such constancy and steadiness of purpose or of labor as is usual with men engaged in like enterprises. Matters incident to the person and not to the enterprise are not such circumstances as will excuse great delay in the work.[92]

In one case, for two years work was done on the ditch for three months only, and the court said:

"Diligence is defined to be the 'steady application to business of any kind, constant effort to accomplish any undertaking.' The law does not require any unusual or extraordinary effort, but only that which is usual, ordinary, and reasonable. The diligence required in cases of this kind is that constancy and steadiness of purpose or labor which is usual with men engaged in like enterprises, and who desire a speedy accomplishment of their designs. Such assiduity in the prosecution of the enterprise as will manifest to the world a *bona fide* intention to complete it within a reasonable time. It is the doing of an act, or series of acts, with all practical expedition, with no delay, except such as may be incident to the work. . . . . Rose during this time may have dreamed of his canal completed, seen it with his mind's eye yielding him a great revenue; he may have indulged the hope of providential interference in his favor, but this cannot be called a diligent prosecution of his enterprise."[93]

§ 102. **Failure to Use Diligence.**—The failure to use diligence is like the failure to post notice, and deprives the claimant of the benefit of the doctrine of relation. It is not fatal if the work is nevertheless completed before others intervene, and the former may claim as an

92 Ophir etc. Co. v. Carpenter, 4 Nev. 534, 97 Am. Dec. 550. See, also, Oviatt v. Big Four etc. Co., 39 Or. 118, 65 Pac. 811.

93 Ophir etc. Co. v. Carpenter, 4 Nev. 534, 97 Am. Dec. 550.

appropriator by actual diversion.[94] Against interveners, however, it is fatal.[95] As between rival claimants neither of whom is diligent, probably the result will be the same as discussed under the matter of notice and both will be deprived of any benefit of the doctrine of relation, not having complied with the code, such being the principle on which De Necochea v. Curtis,[96] and Wells v. Mantes,[97] were decided. It may, however, be that they will be on the same footing as rivals before the code, where the better right existed in the one who was last diligent; that is, the right would relate back to the time when (if any) a new start was first made, and the work thereafter diligently carried on.[98]

F. COMPLETION OF CONSTRUCTION WORK.

§ 103. **Completion of Work Preparatory to Use of Water** was a requisite from the earliest days.[99] As we have seen, the completion of the preparatory work, followed by beneficial use, was alone enough where the doctrine of relation was not involved; the requisites of notice and diligence being merely supplementary to this, the prime factor, in order to apply the doctrine of relation between rival claimants.

§ 104. **What Amounts to Completion.**—The California code definition of completion is that "by completion is meant conducting the waters to the place of intended use."[100]

94 Wells v. Mantes, 99 Cal. 583, 34 Pac. 324.

95 Nevada etc. Co. v. Kidd, 37 Cal. 282; Wells v. Mantes, 99 Cal. 583, 34 Pac. 324; Cal. Civ. Code, 1419.

96 80 Cal. 397, 20 Pac. 563, 22 Pac. 198.

97 99 Cal. 583, 34 Pac. 324.

98 See 60 Am. St. Rep. 801, note.

99 Now required by sec. 1416, Cal. Civ. Code.

100 Civ. Code, sec. 1417.

It is sometimes said that there must be an actual diversion of the waters; but this is too narrow a term, since in peculiar cases the appropriation may be accomplished without any diversion at all. Thus, straightening out a bed of a stream by dykes or dams constitutes an appropriation, though there is no diversion at all.[101] So, simply putting a large current waterwheel in the stream itself would doubtless be an appropriation of enough water to run it. In general, however, there will be no completion without diversion; and usually the diversion consists in carrying the water to distant lands, wherein the doctrine of appropriation has its leading departure from the common law of riparian rights.[102]

The use of existing ditches or works abandoned by others is freely allowed. The appropriator in such case has no need to invoke the doctrine of relation, since no time needs to be lost in construction work. His appropriation need not proceed under the code formalities in such a case; he claims as an appropriator by actual diversion.[103] But the appropriation consequently dates from the new use, not from the original building of the ditch. The new appropriation cannot claim to tack on to the old one.[104] In Utt v. Frey,[105] the court said:

"If one animated by a like desire to appropriate water under like circumstances finds a ditch already constructed to hand, takes peaceable possession thereof,

101 Kelly v. Natoma etc. Co., 6 Cal. 105; Hoffman v. Stone, 7 Cal. 46; Suisun v. De Freitas, 142 Cal. 350, 75 Pac. 1092; McCall v. Porter, 42 Or. 49, 70 Pac. 820.

102 See Pomeroy on Riparian Rights, sec. 48; Kinney on Irrigation, sec. 162.

103 *Ante*, sec. 84 et seq.

104 McGuire v. Brown, 106 Cal. 660, 39 Pac. 1060, 30 L. R. A. 384; Utt v. Frey, 106 Cal. 392, 39 Pac. 807; Wood v. Etiwanda etc. Co., 122 Cal. 152, 54 Pac. 726.

105 106 Cal. at 396, 39 Pac. 807.

and appropriates the water for a like or similar useful purpose, he thereby acquires a like right as against all the world, except the true owner or those holding under or through him. If nature or art has furnished the medium of appropriation he may avail himself of the gift or labor, without being held liable to those having no interest therein and in nowise connected therewith. To the owner of a ditch thus possessed and used, such appropriator must account until his possession and user ripens into a title by prescription or adverse user. His right in such case will depend for priority as against other appropriators of water from the same stream, upon the date of his possession and appropriation, and not upon the date of the original construction of the ditch, and appropriation by some other person under whom he does not hold, and between whom and himself there is no privity of estate. His appropriation in such a case is a new and independent one, and must stand or fall upon its own merits."

§ 105. **Mere Diversion.**—Where the doctrine of relation is not invoked, the diversion for a beneficial purpose is alone enough, constituting the claimant an appropriator by actual diversion as against later claimants.[106]

But mere diversion, if not for a beneficial purpose, is ineffectual in any case. Where water is diverted from the bed of a stream not for use, but to clear out and drain the channel, a mere drainage ditch, there is no appropriation.[107] Likewise where more water is diverted than can be put to any purpose, no right vests in the surplus diverted over what is beneficially used.[108]

106 *Ante*, sec. 84 et seq.

107 Eddy v. Simpson, 3 Cal. 249, 58 Am. Dec. 408; Maeris v. Bicknell, 7 Cal. 261, 68 Am. Dec. 257.

108 Riverside etc. Co. v. Sargent, 112 Cal. 230, 44 Pac. 560; Senior

§ 106. **Changes in the Course of Construction.**—Slight changes may be made, and the original surveyed line departed from.[109]

G. RELATING BACK.

§ 107. **Origin of the Doctrine.**—The question at what date the right accrues as between rival claimants was first before court in Conger v. Weaver.[110] The court said:

"But, from the nature of these works, it is evident that it requires time to complete them, and from their extent, in some instances, it would require much time; and the question now arises, at what point of time does the right commence, so as to protect the undertaker from the subsequent settlements or enterprises of other persons. If it does not commence until the canal is completed, then the license is valueless, for after nearly the whole work has been done, anyone, actuated by malice or self-interest, may prevent its accomplishment; any small squatter settlement might effectually destroy it.

"But I apprehend that, in granting the license which we have presumed for the purpose before us, the State did not intend that it should be turned into so vain a thing but designed that it should be effectual for the object in view; and it consequently follows that the same rule must be applied here to protect this right as in any other.

"Possession and acts of ownership are the usual indications of a right of property, and these must be judged according to the nature of the subject matter.

v. Anderson, 115 Cal. 496, 47 Pac. 454; Smith v. Hawkins, 120 Cal. 86, 52 Pac. 139; Bledsoe v. Decrow, 132 Cal. 312, 64 Pac. 397.

109 Conger v. Weaver, 6 Cal. 548, 65 Am. Dec. 528; Parker v. Kilham, 8 Cal. 77, at 80, 68 Am. Dec. 310; Cal. Civ. Code, sec. 1415.

110 6 Cal. 548, 65 Am. Dec. 528.

"One is in possession of any empty house who has the key to its door in his pocket; of a horse, when he is riding it; of cattle pasturing upon his ground; so a miner, who has a few square feet for his mining claim, which he cannot directly occupy, has possession, because he works it, or because he has staked it off to work it, if his acts show no intention to abandon; building a dam is taking possession of water as a usufruct.

"So, in the case of constructing canals, under the license from the State, the survey of the ground, planting stakes along the line, and actually commencing and diligently pursuing the work, is as much possession as the nature of the subject will admit, and forms a series of acts of ownership which must be conclusive of the right."

§ 108. **Effect of Relation.**—The doctrine of relation is invoked to protect *bona fide* appropriators during the time they are building ditches and other preparatory works; and at the same time, to give no comfort to those who, not *bona fide,* try to monopolize water for speculative purposes. It gives a qualified protection to the former. His right in any case comes into existence only on completion of the work. But his claim is a preferred one. The fact that he posted his notice first and worked diligently gave him a preference over others; a kind of option, though his title did not ripen until the option was exercised by a complete diversion. This was decided after much discussion in the case of Nevada etc. Co. v. Kidd,[111] holding in effect that the doctrine of relation does not vest a water right at the time of posting notice, with a condition subsequent, as is often thought, but vests the right upon actual diversion, with

111 37 Cal. 282. Quoted *supra,* page 149.

a preference to him who first posted notice and worked diligently.[112]

It gives a preference to certain appropriators from the time of completion, on into the future; it does not completely carry title as owner of the water right back to the date notice is posted. Consequently in the interim between posting notice and actual completion (which may be a considerable time) anyone else may divert the water. There is no right of action for such diversion; there is as yet no water right acquired. But after completion, the rights of the rival claimants for future purposes are considered as relating back to the date of notice. The priority of appropriation for future purposes is determined by looking back to that date. All of these propositions are laid down in Nevada etc. Co. v. Kidd,[113] a case since frequently cited and approved.[114]

The appropriator need not take notice of the interveners. His right relates back and he is not under a duty to prevent others from attempting to acquire temporary rights in the meantime.[115]

If an appropriator, after duly posting a notice, and while prosecuting his work with diligence, posts a second notice of appropriation of the same water, the right may still relate back to the first notice.[116]

The doctrine of relation is enacted in the Civil Code of California, section 1418: "By a compliance with the above rules the claimant's right to the use of the water relates back to the time notice was posted." There is

112 Accord De Necochea v. Curtis, 80 Cal. 398, 20 Pac. 563, 22 Pac. 198, and Wells v. Mantes, 99 Cal. 583, 34 Pac. 324.

113 37 Cal. 282.

114 See Pomeroy on Riparian Rights, secs. 53, 54; *ante*, secs. 87, 89 et seq.

115 Woolman v. Garringer, 1 Mont. 535.

116 Pomeroy on Riparian Rights, sec. 51.

no reason to think that this will not be construed in accordance with the decision in Nevada etc. Co. v. Kidd.[117]

The doctrine of relation was also applied in an early Nevada case[118] with a *dictum* that relation was to the commencement of actual work—not necessarily to the notice.[119] The point is settled in California by the code provision quoted above, and in the arid States by statutes dating priority from the date of filing application with the State Engineer.[120]

§ 109. **Actual Application.**—Actual application of the water to the purpose intended is not a prerequisite to invoking the doctrine of relation. The water right comes into complete existence on completion (that is, diversion, that completing the formalities equivalent to taking possession), and matter subsequent thereto is merely matter in defeasance. The actual application and use of the water may then follow, but need not do so immediately. The appropriator has a reasonable time in which to prepare his fields, or the place of use. An unreasonable delay is, however, evidence of abandonment.[121]

There must, however, be an apparent present ability to use the water at completion; the lack of it will be strong evidence against the *bona fides* of the intent

117 See De Necochea v. Curtis, 80 Cal. 396, 20 Pac. 563, 22 Pac. 198; Burrows v. Burrows, 82 Cal. 564, 23 Pac. 146; Wells v. Mantes, 99 Cal. 583, 34 Pac. 324.

118 Irwin v. Strait, 18 Nev. 436, 4 Pac. 1215.

119 The *dictum* is disapproved by Pomeroy on Riparian Rights, sec. 54, note, and Kinney on Irrigation, sec. 168.

120 *Infra*, sec. 116.

121 Senior v. Anderson, 115 Cal. 496, 47 Pac. 454; Senior v. Anderson, 130 Cal. 290, at 296, 62 Pac. 563; Heilbron v. Land etc. Co., 80 Cal. 189, at 193, 22 Pac. 62; Pomeroy on Riparian Rights, secs. 49, 53; Kinney on Irrigation, secs. 34, 348; but see sec. 167. And see *infra*, sec. 145 et seq.

(which must have a reasonable foundation), as in the case of gathering water in a reservoir for mere speculation.[122] Or where water is appropriated for irrigation when one has no lands to be irrigated.[123]

We believe the rule is clearly as we have stated it; namely, that the right is complete without actual application of the water to the beneficial use intended; that this follows from the principles that the right is complete when everything is done that is equivalent to the taking of possession of the stream and when the doctrine of relation can be invoked.[124] Actual application is absolutely necessary; but the lack of it is matter subsequent, working by way of defeasance, on the principles of abandonment. In some States, however, there are many *dicta* that the right is never complete until the water is actually applied to the beneficial use.[125] Logically pushed, as some States allow years to pass (if a reasonable time) until this application is made, it would postpone for years the point when the doctrine of relation takes effect. Whether actual application is a condition precedent or matter subsequent operating by way of abandonment does not, however, aside from this question of relation, appear to make much difference; the result in other connections would, apparently, be the same on either view. But as concerns the doctrine of relation, the view that we have stated is the only one that will avoid difficulty.

The question of application of the water will be a

122 Weaver v. Eureka etc. Co., 15 Cal. 271. And see Nevada etc. Co. v. Kidd, 37 Cal. 282. See 60 Am. St. Rep. 806, note.

123 Miles v. Butte etc. Co. (Mont.), 79 Pac. 549.

124 And from section 1417 of the Civil Code, defining completion as the conducting of waters to the place of intended use, ignoring actual application as an element of the completion of the right.

125 See Kinney on Irrigation, sec. 167. See *dicta* in Union etc. Co. v. Dangberg, quoted *ante*, sec. 22.

matter for consideration again, in discussing the amount an appropriator can divert for future needs, without any present application thereof.

§ 110. **Recapitulation.**—To sum up: An appropriation may be made under the California method (the original method) by actual diversion of the water for a beneficial purpose without more, and is good against everybody from the date of diversion; but no claim can be made to the benefit of the doctrine of relation.

To secure the benefit of the doctrine of relation, there must be posted a notice of appropriation (which must be recorded), there must be a *bona fide* intention to use the water for a beneficial purpose, there must be diligence in the construction work, and the work must be completed (that is, the waters conducted to the place of intended use). These requisites, as at present prevailing under the California method, are substantially the same as those established in the early days by the customs of miners and decisions of the courts. They are founded upon the proposition that the right to water by appropriation is a member of the large class of possessory rights on the public domain, and these requisites are the equivalent of taking possession. Actual application of the water is not a prerequisite to the vesting of the right. The right is complete when possession has been taken. The water must be actually applied to a beneficial use within a reasonable time or the right will cease by abandonment; but application is not a prerequisite to invoking the doctrine of relation.

When the requisites stated have been completed the right to the water relates back to the date of posting notice, in order to determine priority between conflicting claims. It does not, however, carry back any right to complain of intervening use by others in the mean-

time—such temporary use by others is allowed; it establishes priority against them only for future purposes. If the requisites stated have not been strictly complied with, all benefit of the doctrine of relation is forfeited.

CHAPTER VII.

HOW AN APPROPRIATION IS MADE—IN STATES ADOPTING IRRIGATION CODES.

§ 111. Introductory.
§ 112. Application for permit.
§ 113. Examination of application and issuance of permit.
§ 114. Prosecution of the work.
§ 115. Issuance of certificate of appropriation.
§ 116. Relation.
§ 117. Measurement of water.

§ 111. One of the essential features of the new legislation is the adoption of a comprehensive method of making appropriations hereafter. This legislation is adopted chiefly by the arid States. The statutes in this respect are all much alike, though varying in detail. This method is in force in Colorado, Idaho, Nebraska, Nevada, North Dakota, Oklahoma, South Dakota, Utah, and Wyoming. The recent Oregon statute resembles this method more than the California method, while the recent New Mexico statute resembles rather the California method.[1]

In the main, the essentials of this method consist in (1) an application for a permit; (2) an examination thereof and issuance of permit; (3) provisions governing the prosecution of the work; (4) issuance of a certificate of appropriation on completion of the work; (5) numbering of the certificates successively according to the date of the application for permit, and dating priority by relation to that date. In some States the matter is carried one step further, providing for the

1 See Appendix and *ante*, sec. 20.

actual application and beneficial use of the water before the final certificate issues. This method must be followed whatever the purpose of the appropriation—whether for irrigation or other uses.

The method prescribed sometimes applies likewise to changing or enlarging an appropriation, or else a similar method is specially provided; *e. g.*, Nebraska,[2] Idaho,[3] Nevada,[4] Utah,[5] and Wyoming.[6] In Colorado a change of point of diversion must be made in a method similar to that provided for determination of priorities.[7]

§ 112. **Application for Permit.**—In all these States application in duplicate must be filed with the authorities. In all but one, the application must be made before beginning any work. The exception is Colorado, where it must be filed within sixty days after beginning.[8] In all but one the application is filed with the State (in Oklahoma, the Territorial) Engineer. The exception is Nebraska, where it must be filed with Board of Irrigation.[9] The forms for these applications are in all furnished by the authority to whom the application is made, and in most of the States must be sworn to. It contains a statement of the plan of the work, the details of description required varying in the different States. Duplicate maps must accompany the application in Colorado,[10] Idaho,[11] and Wyoming,[12] and

2 Comp. Stats. 1903, sec. 6436.
3 Stats. 1903, p. 223, sec. 1, as amended 1905, p. 357.
4 Stats. 1905, p. 66.
5 Stats. 1905, c. 108, sec. 53.
6 Rev. Stats. 917.
7 3 M. A. S., 1905 ed., sec. 2273d et seq.
8 3 M. A. S., 1905 ed., secs. 2265a, 2265h.
9 Comp. Stats. 1903, p. 6436.
10 Stats. *supra*.
11 Stats. 1903, p. 223, sec. 2, as amended 1905, p. 357.
12 Rev. Stats., 917-924.

in most of these States. In three, however, the filing of maps is postponed until after the approval of the application.[13] In Idaho if applicant is a corporation, the application must contain matters in description of the corporation also.[14] In all, great discretion is allowed the State Engineer in calling for additional information.

It is in all the duty of the State Engineer (Board of Irrigation in Nebraska) to examine the application.

§ 113. **Examination of Application and Issuance of Permit.**—The State Engineer is required to examine the application, comparing it with the information and records of existing appropriations in his office, and may usually call upon the applicant for additional information, or send the application back to the applicant to be corrected. He makes a record in his office of the date of filing the application, and, in general, of all papers filed with him. In Nevada and Utah special provisions are made to give others a chance to protest. In these two States, the State Engineer, after examining the application, publishes a notice of the application in a newspaper for thirty days (in Nevada, four weeks), and within thirty days after final publication, protests may be filed with him.[15] If everything is satisfactory, the State Engineer indorses on the duplicate application, in all the States, his approval, and makes a record thereof, and returns it to the applicant, which constitutes his permit to proceed. If rejected, it is returned so indorsed, with reasons. Appeal usually lies from the State Engineer to the governing board or to court.

13 *Infra*, sec. 114.

14 Stats. *supra*.

15 Nev. Stats. 1905, p. 66; Utah Stats. 1905, c. 108, secs. 36-40. Likewise in North Dakota, Oklahoma, South Dakota. (See Appendix.)

§ 114. **Prosecution of the Work.**—In the States which do not require maps upon the filing of the application, duplicate maps must be filed with the State Engineer after its approval. In Nevada the maps must be filed on the approval of the application.[16] In Nebraska (with the Board of Irrigation) and Utah, within six months after approval.[17]

In all the States the work must be prosecuted with diligence; but certain limits are placed in some of them. Work must begin in Nebraska and Utah within six months after approval of application.[18] In Wyoming it must begin within a time fixed by the State Engineer, not exceeding one year.[19] In Idaho if the capacity of the proposed works is less than twenty-five cubic feet per second, work must begin within sixty days; if over that capacity, a bond must be filed within sixty days in an amount fixed by the State Engineer not exceeding $10,000.[20] The work must be completed, in Idaho, Oklahoma, South Dakota, Utah, and Wyoming within five years, but the State Engineer may name a shorter time,[21] while in Nevada it must be completed in the time requested in the application, though the State Engineer may name a shorter time.[22] In Idaho, Oklahoma and South Dakota there is a further provision that one-fifth of the work must be done in one-half the time allowed, and the State engineers of some of the other States (see forms in Appendix) specify the same requirement in the absence of statute upon the point.[23]

16 Stats. 1905, p. 66.

17 Neb. Comp. Stats. 1903, secs. 6437, 6470; Utah Stats. 1905, c. 108, secs. 42-44.

18 Stats. *supra.*

19 Rev. Stats., 922.

20 Stats. 1903, p. 223, secs. 2, 3, as amended 1905, p. 357.

21 Stats. *supra.*

22 Stats. 1905, p. 66.

23 Stats. *supra.* See Appendix.

Proof of completion of the work must be made in all States except Colorado. In Idaho and Utah there are special methods for making this proof. In the former it must be filed with the State Engineer on a form provided by him, and, if the works exceed a capacity of fifty cubic feet per second, must be certified to by some competent and well-known irrigation engineer. This is published for four weeks in a newspaper. The State Engineer then makes an examination of the works and files a report. If all is satisfactory he issues a certificate of completion.[24] In Utah, a sworn statement and proof must be filed with the State Engineer on a form provided by him, subscribed by two witnesses, and accompanied by maps also certified.[25] In most of the States the method of making proof of completion is left to the discretion of the State Engineer or Board of Irrigation.

On proof of completion, a certificate is issued which is final, with the exception of four States and Territories,[25a] where the final certificate is not issued until actual application of the water to a beneficial use, and Colorado, where the first certificate (issued on original application to appropriate) ends the appropriator's connection with the office of the State Engineer.

§ 115. **Issuance of Certificate of Appropriation.**—The final stage in making the appropriation is the issuance of a certificate of appropriation. These certificates are numbered consecutively according to the date of original application for a permit, thus preserving the doctrine of relation, which was one of the chief features of the law of appropriation as it originally arose in California.

24 Stats. *supra.*

25 Stats. *supra*, secs. 42-44.

25a Idaho, North Dakota, Oklahoma, and South Dakota.

Upon the proof of completion of work the State Engineer (the Board of Irrigation in Nebraska) issues a certificate to the appropriator under his seal stating details varying in different States. A record of this is made in his office. The appropriator is required to record this with the recorder of the county in which the water is diverted, and, in a few of these States, with the head of the water subdivisions in which the stream lies.[26]

In Colorado, the approval of the original application constitutes a certificate of appropriation.[27] On the other hand, in Idaho, North Dakota, Oklahoma, and South Dakota, there is one further step that must be gone through before the final certificate is issued. Within a fixed time after the issuance of the certificate of completion of work, there must be filed with the State Engineer a sworn notice of actual application and use of the water. This notice must be subscribed by two witnesses. The State Engineer must then make an examination of the use to which the water is put. Protests may be filed with the State Engineer by other parties. If all is satisfactory, the State Engineer issues a final certificate, or, as it is in these States called, a license, bearing the number and date of the original application for permit, and it is filed and put on record as in the other States.[28]

§ 116. **Relation.**—Priority in all dates from the date of filing of the original application; and this is evidenced by numbering all certificates consecutively.[29] In Idaho, on enlargement or on a grant of extra time,

26 Stats. *supra*. See *infra*, chapter XII.

27 3 M. A. S., 1905 ed., secs. 2265a, 2265h.

28 Idaho Stats. 1903, p. 223, secs. 4-12, and see Appendix B.

29 Stats. *supra*.

priority dates from the application for permission to make such enlargement or to have such extra time.[30]

§ 117. **Measurement of Water.**—The unit of measurement of water is one cubic foot per second ("Second-foot") in Nevada,[31] Nebraska[32] and Wyoming.[33] In Nebraska, however, the miner's inch remains the standard where already in use, and fifty-nine miner's inches are declared equal to one cubic foot per second.[34] In Colorado[35] and Utah[36] the second-foot is the unit for flowing water, but for volume in the former, one cubic foot is the standard; in the latter, one acre-foot.[37]

In some of these States a limit is placed on the amount of water that can be allotted to each appropriator. In Nebraska and Wyoming it is one second-foot for each seventy acres irrigated.[38] In Idaho it is one second-foot for each fifty acres, unless the State Engineer otherwise specifies and subject to local customs and rules.[39] In Nevada three acre-feet per year was first adopted as a limit, but this has been repealed.[40]

The great formality attending appropriation under these statutes is not unlikely to somewhat hinder any but large enterprises, and tend somewhat to prevent small appropriators from acquiring rights. Evidently it is intended that large companies shall be formed to

30 Stats. 1903, p. 223, secs. 5, 8.
31 Comp. Laws 1900.
32 Comp. Stats. 1903, sec. 6428.
33 Rev. Stats. 968.
34 Stats. *supra.*
35 M. A. S. 2467.
36 Stats. 1905, c. 108, sec. 48.
37 43-560 cubic feet.
38 Stats. *supra.*
39 Stats. 1903, p. 223, sec. 9, as amended 1905, p. 174.
40 Stats. 1903, p. 18, sec. 2. Repealed in Stats. 1905, p. 66.

supply consumers, rather than that consumers should supply themselves directly, as heretofore.

The second-foot is the unit for flow and the acre-foot is the unit for volume also in South Dakota,[41] Oklahoma,[42] and in New Mexico.[43] Likewise one second-foot for each seventy acres is the maximum allowed in South Dakota,[44] Oklahoma,[45] and New Mexico.[46] In North Dakota the maximum is one second-foot for each eighty acres.[47]

41 Stats. 1905, p. 201, c. 132, sec. 44.
42 Stats. 1905, p. 274, c. 21, sec. 27.
43 Stats. 1905, p. 270, sec. 3.
44 Stats. 1905, p. 201, c. 132, sec. 46.
45 Stats. 1905, p. 274, c. 21, sec. 29.
46 Stats. 1905, p. 270, sec. 4.
47 Stats. 1905, p. ——, sec. 49.

CHAPTER VIII.

LIMITATIONS ON EXERCISE OF THE RIGHT.

§ 118. Introductory.

A. LIMITATIONS ARISING OUT OF NATURE OF RIGHT.

§ 119. Nature of the right.
§ 120. Contracts in general concerning water rights.
§ 121. Conveyances.
§ 122. Appurtenance.
§ 123. Parol sale.
§ 124. Usefulness and continuance of use.

B. LIMITATIONS ON MANNER OF USE.

§ 125. In general.
§ 126. Change of means of use.
§ 127. Wastefulness.
§ 128. Use in artificial watercourse—Ditches, flumes, etc.
§ 129. The ditch, etc., is an easement.
§ 130. Ditch and water right distinguished.
§ 131. Water in artificial watercourse is personalty.
§ 132. The law of natural waters does not apply to artificial watercourses.
§ 133. Natural dry ravines as artificial watercourse.
§ 134. Changes in ditches, etc.
§ 135. Repair of ditches.
§ 136. Damage from breaking ditches, etc.
§ 137. Contracts concerning ditches.

C. LIMITATIONS ON QUANTITY OF WATER.

§ 138. Introductory.
§ 139. No more than originally claimed.
§ 140. No more than capacity of ditch.
§ 141. No more than actually used.
§ 142. Whole stream.
§ 143. Where no other claimants.
§ 144. Preferences and pro-rating.
§ 145. Appropriations for future needs.
§ 146. Same.
§ 147. Summary.

D. LIMITATIONS ON CHANGE OF PLACE OR PURPOSE.

§ 148. What constitutes a proper place or purpose.
§ 149. No injury to others.
§ 150. Change of place of diversion or use.
§ 151. Change of purpose.

§ 118. We now leave the questions arising out of the obtaining of water rights and take it as granted that a valid water right had been obtained by appropriation, as previously set forth. The inquiry now is as to the limits within which the water can be then used. The limitations to be considered are (1) those arising out of the nature of the right; (2) those concerning the manner of use; (3) concerning the amount used; (4) concerning change of the purpose for which used and of the place of diversion or use.

A. LIMITATIONS ARISING OUT OF NATURE OF RIGHT.

§ 119. **Nature of the Right.**—We have already discussed the nature of a water right and shown its characteristic features.[1]

It is real estate, an incorporeal hereditament.

It is usufructuary, a use and flow, and there is no title to the water itself, nor to the channel itself.

It is exclusive.

It is independent of title or possession of any land.

It is entirely distinct from the right to the ditch or other artificial watercourse by which the water is diverted.

It is a possessory right only, and may be lost by abandonment.

§ 120. **Contracts in General Concerning Water Rights.**—There is really no limitation on the power to deal with existing appropriations by contract. A reference to the

1 *Ante*, sec. 38 et seq.

cases in general will disclose all kinds of contracts made by the owners thereof whereby the water is apportioned between them, sold, or dealt with like other property. The court in Ortman v. Dixon[2] says: "It can be transferred like other property." There would be no benefit in going into details here; a little more concerning this will be said in dealing with the subject of ditches and artificial watercourses, later.

One case may, however, be stated to show the great freedom in this respect.[3] A homestead claimant had sold a water right of appropriation and a ditch appurtenant to the land, before final proceedings. The United States statutes prohibit a homestead claimant from disposing of his land before he acquires full title. This was held not to interfere with the sale of the water right acquired by appropriation.

A similar question arose in Lobdell v. Hall.[4] It was held that an Indian may make an appropriation. The United States statutes, however, forbid the sale of lands by Indians. The court seems to have thought that the sale of a water right was not within this prohibition.

Contracts for water supply are governed by the ordinary law of contracts. It may be noted that under the California Civil Code, such contracts may be made to run with the land to subsequent purchasers, even in cases where they would not run with the land at common law.[5] But that is owing to no peculiarity of the law of appropriation; it applies to other contracts also.[6]

2 13 Cal. 33.

3 Mt. Carmel etc. Co. v. Webster, 140 Cal. 183, 73 Pac. 826.

4 3 Nev. 507.

5 Fresno Rate Cases; Fresno Canal etc. Co. v. Rowell, 80 Cal. 114, 13 Am. St. Rep. 112; Fresno Canal etc. Co. v. Dunbar, 80 Cal. 530; Balfour v. Fresno Irr. Co., 109 Cal. 221; Fresno Canal etc. Co. v. Park, 129 Cal. 435.

6 See Cal. Civ. Code, sec. 1468.

In Colorado there is a special statutory provision concerning the "loan" of water.[7]

§ 121. **Conveyances.**—Possessory rights on the public domain were always recognized as transferable. It is consequently said[8] that a water right can be transferred like other property. The only exception is the case of parol sale.[9] By a written conveyance priority is preserved.[10]

Being an interest in realty, a sale of water right is within the statute of frauds, and requires a writing.[11] The sale must be recorded as it is within the recording statutes.[12] The water right may be sold on execution as an interest in realty.[13] The statute of limitations concerning land[14] applies to water rights.[15]

The water right may be sold in parts,[16] the purchasers becoming tenants in common.[17] The sale is complete on delivery of a deed and possession.[18] The grantee cannot sue for a diversion antedating the sale.[19] A sale

7 Fort Lyon Co. v. Chew (Colo.), 81 Pac. 37.

8 In Ortman v. Dixon, 13 Cal. 33.

9 *Infra*, secs. 123, 188.

10 Smith v. O'Hara, 43 Cal. 371; Kinney on Irrigation, sec. 254; Jacob v. Lorenz, 98 Cal. 332, 33 Pac. 119. See cases to this effect collected in 65 L. R. A. 407, note.

11 Smith v. O'Hara, 43 Cal. 371; O'Neto v. Restano, 78 Cal. 374, 20 Pac. 743; Dorris v. Sullivan, 90 Cal. 279, 27 Pac. 216; Hayes v. Fine, 91 Cal. 391, 27 Pac. 772; Griseza v. Terwilliger, 144 Cal. 456, 77 Pac. 1034.

12 Partridge v. McKinney, 10 Cal. 181; Lyles v. Perrin, 119 Cal. 264, 51 Pac. 332; Utah Laws 1905, c. 108, secs. 62, 63, and the irrigation codes generally.

13 Gleason v. Hill, 65 Cal. 17, 2 Pac. 413.

14 Five years; Cal. Code Civ. Proc., 318.

15 Yankee Jim etc. v. Crary, 25 Cal. 504, 85 Am. Dec. 145; *infra*, sec. 194 et seq., adverse possession.

16 McDonald v. Askew, 29 Cal. 200.

17 Rose v. Mesmer, 142 Cal. 322, 75 Pac. 905.

18 Booth v. Chapman, 59 Cal. 149.

19 Kimball v. Gearhart, 12 Cal. 27.

of the surplus one does not need passes nothing, since an appropriation gives no right to such surplus.[20] The right may be sold separate from the land, since it is independent of title to or possession of any land.[21]

§ 122. **Appurtenance.**—It is well settled that a water right may pass with land as an appurtenance thereto, or as a parcel thereof.[22]

But the water right is not necessarily appurtenant to or parcel of any land; and whether it is an appurtenance or parcel is a question of fact resting chiefly upon whether it was used specially for the benefit of the land in question.[23] It will usually in such case pass on a sale of the land, though appurtenances are

20 Johnston v. Little Horse etc. Co. (Wyo.), 79 Pac. 22.

21 *Ante*, sec. 42, and Hard v. Boise City etc. Co. (Idaho), 76 Pac. 331, and cases collected in 65 L. R. A. 407, note; Long on Irrigation, sec. 77. Under irrigation codes, approval of the State Engineer is necessary. (Appendix B.)

22 Quirk v. Falk, 47 Cal. 453; Reynolds v. Hosmer, 51 Cal. 205; Hungarian etc. Co. v. Moses, 58 Cal. 168; Lower Kings River etc. Co. v. Kings etc., 60 Cal. 408; Fitzell v. Leaky, 72 Cal. 477, 14 Pac. 198; Standart etc. Co. v. Round Valley etc. Co., 77 Cal. 399, 19 Pac. 689; Mitchell v. Amador Canal etc. Co., 75 Cal. 464, 17 Pac. 246; Conradt v. Hill, 79 Cal. 587, 21 Pac. 1099; McShane v. Carter, 80 Cal. 310, 22 Pac. 178; Crooker v. Benton, 93 Cal. 365, 28 Pac. 953; Clyne v. Benicia etc. Co., 100 Cal. 310, 34 Pac. 714; Dixon v. Schermeier, 110 Cal. 582, 42 Pac. 1091; Smith v. Corbit, 116 Cal. 587, 48 Pac. 725; Williams v. Harter, 121 Cal. 47, 53 Pac. 405; Pendola v. Ramm, 138 Cal. 517, 71 Pac. 624; Senior v. Anderson, 138 Cal. 716, 72 Pac. 349; Nevada etc. Co. v. Bennett, 30 Or. 59, 60 Am. St. Rep. 777, 45 Pac. 472; Arnett v. Linhart, 21 Colo. 188, 40 Pac. 355; Gelwicks v. Todd, 24 Colo. 494, 52 Pac. 788; North American Exploration Co. v. Adams, 104 Fed. 404. See cases collected in 65 L. R. A. 407, note, and 17 Ency. of Law, 515. Utah Laws 1905, c. 108, sec. 617; Idaho Stats. 1903, p. 223, sec. 9, as amended 1905, p. 174, sec. 38; Oklahoma Stats. 1905, p. 274, secs. 21, 30; South Dakota Stats. 1905, p. 201, secs. 31, 47, and irrigation codes generally. Cf. Cal. Civ. Code, sec. 662.

23 Quirk v. Falk, 47 Cal. 453; Mitchell v. Amador Canal etc. Co., 79 Cal. 464, 17 Pac. 246; Payne v. Cummings, 146 Cal. 426, 80 Pac. 620.

not mentioned.[24] This suggests the question, probably of little more than academic importance, whether the water right is more properly spoken of as an appurtenance or as parcel of the land. In most of the cases it is called an appurtenance. In some[25] it is spoken of as an incident to or parcel of the land. In one,[26] the words "appurtenance" and "parcel" are used indiscriminately.[27] It would seem that it is more properly called an appurtenance. Originally the water right was, as riparian right, parcel of the government land through which the stream flowed. The very diversion which gave rise to the appropriation severed it from the land of which it might otherwise have been spoken as a parcel. That an appropriation may be an appurtenance of land, whereas riparian rights are parcel thereof, would seem to be another way of expressing a distinction between riparian rights and appropriation.[28]

Water appropriated by a trespasser for use on certain lands does not become appurtenant thereto, and a purchaser of the land from the true owner gets no right to the water.[29]

Viewing the question of appurtenance more narrowly it will be found that the water right may be appurtenant to a specific portion of land, viz.: The ditch or artificial watercourse through which the waters flow after diversion,[30] or *vice versa,* the ditch appurtenant

24 Cave v. Crafts, 53 Cal. 136; McShane v. Carter, 80 Cal. 310, 22 Pac. 178; Smith v. Corbit, 116 Cal. 587, 48 Pac. 725.

25 McShane v. Carter, 80 Cal. 310 22 Pac. 178; Smith v. Corbit, 116 Cal. 587, 48 Pac. 725; Williams v. Harter, 121 Cal. 47, 53 Pac. 405.

26 Payne v. Cummings, 146 Cal. 426, 80 Pac. 620.

27 And see Bank of British N. A. v. Miller (Or.), 6 Fed. 545.

28 See Kinney on Irrigation, sec. 267.

29 Smith v. Logan, 18 Nev. 149, 1 Pac. 678.

30 Williams v. Harter, 121 Cal. 47, 53 Pac. 405; Fudickar v. East

to water right.[31] A discussion of this point may be properly left until reaching the matter of artificial watercourses.[32]

§ 123. **Parol Sale.**—In the treatment of parol sale of water rights, there is a peculiarity afforded by the law of appropriation. If the grantee incurs considerable expense, and makes improvements on the faith of the parol sale, the usual rule of specific performance in equity, the part performance taking the case out of the statute of frauds, applies.[33]

But it is not necessary to invoke that doctrine. That doctrine would give the grantee only the equitable title and would apply only where the grantor was joined as a party to a suit. A parol sale of a water right, however, in spite of the statute of frauds, may give a good legal title against all the world.

This arises out of the peculiar nature of possessory rights on the public domain. In the early days the possessor disclaimed any right to an interest in the land itself; he insisted only on a right to go upon it and use it. The license or permission given by the tacit consent of the United States was the thing emphasized. All rights of property are theoretically choses in action; a right to redress injuries done thereto; and in the early possessory rights this idea, usually a remote one elsewhere, came into prominence. Emphasis was placed, not upon the thing itself, but upon the permission of the government to make use of it, a license

Riverside etc. Dist., 109 Cal. 29, 41 Pac. 1024; Lower etc. Co. v. Kings etc. Co., 60 Cal. 408; Reynolds v. Hosmer, 51 Cal. 205.

31 Jacob v. Lorenz, 98 Cal. 332, 33 Pac. 119.

32 *Infra*, sec. 128 et seq.

33 Flickinger v. Shaw, 87 Cal. 126, 22 Am. St. Rep. 234, 25 Pac. 268, 11 L. R. A. 134; Blankenship v. Whaley, 124 Cal. 300, 57 Pac. 79; Churchill v. Russell (Sept., 1905), 30 Cal. Dec. 361.

personal in its nature. Accordingly it had been held[34] that a transfer of a mining claim operated as a surrender of the grantor's right and the acquisition of a new one by the grantee on taking possession, so that no writing was needed, and transfers of possessory rights on the public domain were held not within the statute of frauds at all. The supreme court of the United States affirmed this view.[35] To-day, in spite of these decisions, a sale equivalent to a sale of anything else, operating as a transmission of a right, not as the creation of a new one, is recognized if in writing.[36] The possessory estate thus acquired has been elevated to the dignity of other interests in realty, being recognized as an express grant from the government. But the personal license characteristic, as concerns water rights at least, remains of importance in this matter of parol sales.

A water right, then, may be transferred by a parol sale, provided the grantee enters into possession.[37] The same result will be accomplished by a faulty deed.[38] The rights of the grantee, however, are different from those under a true sale, in writing. He does not acquire the grantor's right by transmission; does not step into his shoes; but acquires a new right as an appropriator by actual diversion. Consequently the grantee loses the priority his grantor had. A parol sale allows claimants between the original appropriation and the

34 In Table Mt. M. C. v. Stranahan, 20 Cal. 198.

35 In Union etc. Co. v. Taylor, 100 U. S. 39, 25 L. ed. 541. And later again in Black v. Elkhorn M. Co., 163 U. S. 445, 16 Sup. Ct. Rep. 1101, 41 L. ed. 221, declared this principle to be correct.

36 As to water rights, cases already cited, and compare California Civil Code, section 1411, "successor in interest." As to mining claims, Lindley on Mines, section 642.

37 Smith v. O'Hara, 43 Cal. 371; Griseza v. Terwilliger, 144 Cal. 456, 77 Pac. 1034.

38 Barkley v. Tieleke, 2 Mont. 59.

date of the parol sale, to come in with the priority in their favor as against the grantee.[39] In Smith v. O'Hara, cited *supra,* the decision was as follows:

"The plaintiff adduced no written evidence of the transfer to himself of the right to the ditch through which were conveyed the waters claimed by him, from those who had constructed it, or been in possession of it, but he proved by oral testimony that it was sold to him by Woods, the person, or one of the persons, who had constructed and used it. This evidence was properly stricken out by the court. But the court, in instructing the jury in respect to the appropriation and use of the waters of the creek, charged them in respect to the relative rights of Woods and the miners who used the waters of the creek. This was calculated to mislead the jury, by giving them the impression that the plaintiff had succeeded to the rights of Woods. The instruction, in that respect, was erroneous, and the defendants, in order to correct that erroneous impression, were entitled to have the instruction given which was asked by them to the effect that the plaintiff could not connect himself with the rights acquired by Woods, and Sedgwick, except by deed. We cannot say that this error did not injure the defendants, for it cannot be ascertained from the record whether the jury found for the plaintiff upon his own appropriation and use of the waters or upon that of Woods and Sedgwick."[40]

39 Smith v. O'Hara, 43 Cal. 371; Griseza v. Terwilliger, 144 Cal. 456, 77 Pac. 1034; Chiatovich v. Davis, 17 Nev. 133, 28 Pac. 239; Salina etc. Co. v. Salina etc. Co., 7 Utah, 456, 27 Pac. 578; Pomeroy on Riparian Rights, secs. 58, 89. See cases collected in 65 L. R. A. 407, note, at 412.

40 See accord Pomeroy on Riparian Rights, sec. 58, Kinney on Irrigation, sec. 253, and Union Mill & Min. Co. v. Dangberg, 81 Fed. 73, citing cases. Also Low v. Schaffer, 24 Or. 239, 33 Pac. 678; South Tule etc. Co. v. King, 144 Cal. 450, 77 Pac. 1032; Gould on Waters, sec. 234.

And in a later case the California court says:

"The objection made by defendant is, that plaintiffs could not prove title by a parol sale, the interest conveyed being realty. Plaintiffs answer that the evidence was not offered to prove title, but as declarations against interest and as showing abandonment, to defeat defendant's alleged title, and that the court did not admit the evidence to prove title. Mr. Kinney states the doctrine to be, that the right to the use of the water acquired by prior appropriation, and the structure through which the diversion is effected, must be conveyed by a written instrument, as in the case of real property, and that a verbal sale is nugatory. (Citing cases.) The author further says, however, that such a sale works an abandonment, and the vendee takes his right simply as a subsequent appropriator in his regular order with subsequent appropriators. (Kinney on Irrigation, secs. 253, 255, 264.)

"Mr. Pomeroy says that abandonment may be express and immediate by the intentional act of the appropriator, or may be implied from his neglect, failure to use due diligence in the construction of his works, non-use of them after completion and the like. The general doctrine concerning the effect of abandonment is stated to be, that the prior appropriator loses all his exclusive rights to take or use the water which he had acquired. 'A verbal sale and transfer of his water right by a prior appropriator operates *ipso facto* as an abandonment thereof. Such act shows an unequivocal intent on the part of the appropriator to give up and relinquish all of his interest, and, as it does not effect any transfer thereof to the attempted assignee or vendee, the only possible result is an immediate and complete abandonment.'[41] It is not necessary, we think, to invoke the

41 Pomeroy on Water Rights, secs. 96, 97.

rule as to an executed parol contract such as arose in Flickinger v. Shaw,[42] nor to pass upon the applicability of the principle there enunciated to the present case. The evidence clearly was admissible to show abandonment, and may be restricted to that object, and thus restricted fully justifies the finding of the court. It was not admitted to prove title, as clearly appears from the ruling of the court. Defendant claimed through Terwilliger, her husband, and offered evidence in support of her claim. It was competent for plaintiffs to show that long before defendant's deed, and continuously for many years, he had treated his right as abandoned, and his verbal sale was admissible as tending to establish this fact. The sale conferred no title upon Musgrave, but the subsequent use by him and his associates and their successors of all the water was an appropriation of whatever water Terwilliger was entitled to prior to the sale."[43]

This principle that the grantee on a parol sale acquires a new right as an appropriator by actual diversion, but that it operates by way of abandonment, forfeiting priority, is in full force in California.[44] But in Montana and Oregon it is losing ground. They have refused to apply it to the case of a settler or squatter who has taken no steps to obtain title by filing upon the land. Such a bare settler has a possessory right to the land which, it is held, may be transferred by parol, and the parol sale will carry the water right as an appurtenance, preserving priority.[45] In McDonald v. Lannen the court says:

42 87 Cal. 126, 22 Am. St. Rep. 234, 25 Pac. 268, 11 L. R. A. 134.

43 Griseza v. Terwilliger, 144 Cal. 456, 77 Pac. 1034.

44 See late case cited *supra*.

45 McDonald v. Lannen, 19 Mont. 73, 47 Pac. 648; Wood v. Lowney, 20 Mont. 273, 50 Pac. 794; Hindman v. Rizor, 21 Or. 112, 27 Pac. 13 (citing Oregon cases).

"We are satisfied that a verbal transferee of a settler's claim and water right appurtenant thereto, who takes possession of the same, is the successor in interest of the original appropriator of the water, that he does not take it by recapture, and that he can avail himself of his predecessor's priority."

In this case, Barkley v. Tieleke, cited *supra,* was held to have arisen out of mining conditions and not to be applicable to appropriations of water for agricultural purposes. Barkley v. Tieleke was disapproved, if not actually overruled, and as it was relied on by Pomeroy,[46] and Pomeroy was relied on by the California court in the late case cited *supra,* this considerably weakens the rule that a parol sale operates by way of abandonment.

The reasoning on which this rule is based would lead to the harsh result that a parol sale or a faulty deed endangers the rights of the grantor, by working an abandonment of his priority in case the object of the parol sale is not carried out. Until possession is transferred (possession of ditches, etc., since that is equivalent to possession of the water right, *ante*) he would not be harmed, as until then the parol sale and abandonment would not be complete. But if the grantee, having taken possession, wishes to retransfer to the grantor, or if, for some reason, the grantor wishes to re-enter, as for example, in case of default on promises by the grantee, the grantor himself could now claim only as an appropriator by actual diversion, and would have lost his priority. The writer has not seen any decision on the point; but it might properly be held that the abandonment is only conditional; that a parol sale is evidence of an abandonment, but not conclusive, depending on the success of the whole plan of which it

46 Secs. 58, 89, 96, 97.

was a part. This would be supported by the decision in McGuire v. Brown,[47] where an owner abandoned an old ditch and used the water through a new one, which, it turned out, he had mistakenly built on another man's land without right. This, it was held, gave no right to use the water in the new ditch, but there was not necessarily an abandonment of the right to use it in the old one. However, in Griseza v. Terwilliger, 144 Cal. 456, 77 Pac. 1034, citing Pomeroy on Riparian Rights, section 89, it is said that a parol sale is an unequivocal sign of relinquishment, and works *ipso facto* as an abandonment.[48]

§ 124. **Usefulness and Continuance of the Use.**—This is the most important limitation arising out of the nature of a water right. The water must be continually used for a beneficial purpose. The consideration of this will be postponed until dealing with abandonment. The water right is not held absolute in the full sense, but conditionally upon continued application of the water to a beneficial use.[49]

B. LIMITATIONS OF MANNER OF USE.

§ 125. **In General.**—It has been said that the appropriator may use the water in any manner necessary to carry out the use for which it was appropriated.[50] It is a rule applying equally to all branches of the law of waters that whether the use is by waterwheels, taking it in pumps, using it in steam boilers, or hydraulic rams, or appliances of whatever kind, makes no differ-

47 106 Cal. 660, 39 Pac. 1060, 30 L. R. A. 384.

48 See, also, Black v. Elkhorn M. Co., 163 U. S. 445, 16 Sup. Ct. Rep. 1101, 41 L. ed. 221.

49 *Infra*, chapter XII.

50 Stone v. Bumpus, 46 Cal. 218; Abbott v. Pond, 142 Cal. 393, 76 Pac. 60.

ence.[51] The means used are, however, an indication of the amount appropriated.[52]

§ 126. **Change of Means of Use.**—The means of use may be changed so long as no one is injured in making the change.[53] That is, the priority is not lost; and whether the change can be made rests on whether the acts done in making it would be lawful under the general law, if done in any other connection. As the change is usually by changing ditches, flumes, etc., the matter is further considered below.[54]

§ 127. **Wastefulness.**—The rule against wastefulness is the chief limitation on the manner of use. As the water must be used for a beneficial purpose, wastefulness is not countenanced.[55] If one builds a dam, spreading out the water for cattle to wallow in, so that much is lost by evaporation, an injunction will be granted.[56] Consequently, the amount of water to which the appropriator is entitled is limited to the amount actually beneficially used, though he claimed more in his notice, or his works had a larger capacity.[57] An appropriator, having as much as he needs,

51 Charnock v. Higuerra, 111 Cal. 473, 52 Am. St. Rep. 195, 44 Pac. 171, 32 L. R. A. 190; Coleman v. Le Franc, 137 Cal. 214, 69 Pac. 1011; Miller etc. v. Rickey, 127 Fed. 573; Pomeroy on Riparian Rights, sec. 50, citing Thomas v. Guiraud, 6 Colo. 530.

52 *Infra*, sec. 138 et seq.

53 Cal. Civ. Code, sec. 1415; Charnock v. Higuerra, 111 Cal. 473, 52 Am. St. Rep. 195, 44 Pac. 171, 32 L. R. A. 190.

54 Sec. 134. See, also, sec. 148 et seq.

55 Barrows v. Fox, 98 Cal. 63, 32 Pac. 811; Civ. Code, sec. 1411; Riverside etc. v. Sargent, 112 Cal. 230, 44 Pac. 460; Bledsoe v. Decrow, 132 Cal. 312, 64 Pac. 397; Barneich v. Mercy, 136 Cal. 205, 68 Pac. 589; Farnham on Waters, p. 2131.

56 Ferrea v. Knipe, 28 Cal. 340, 87 Am. Dec. 128.

57 Riverside etc. v. Sargent, 112 Cal. 230, 44 Pac. 460; Smith v. Hawkins, 120 Cal. 86, 52 Pac. 139; Bledsoe v. Decrow, 132 Cal. 312,

cannot, by buying up riparian land, get an additional amount, having no need for it.[58] The fact that a pipe-line conveys water with much less loss by seepage and evaporation than a ditch does not necessarily show that there is waste within this limitation.[59] "Conveying it through a ditch, even, will always cause some loss, and, if the distance is great, or the soil loose or porous the loss will be considerable. This, within any reasonable expense, is generally unavoidable. But, however this may be, if the appropriation has been made before others acquired rights in the stream, after that, no change can be made to their detriment. The first appropriator must continue to use it in at least as economical a manner as before, and cannot change the method of use so as to materially increase the waste."[60]

The appropriator is not required to furrow his land before irrigating the same.[61]

§ 128. **Use in Artificial Watercourse—Ditches, Flumes, in General.**—Conveyance in ditches, flumes, etc., is the means usually adopted in putting the water to use. In mining, where the doctrine of appropriation arose, the water is ditched, flumed, or piped long distances, sometimes fifty or more miles. A ditch is an artificial watercourse.[62] It is real estate.[63]

64 Pac. 397; Walker v. Lillingston, 137 Cal. 401, 70 Pac. 282; *infra*, sec. 138 et seq.

58 Senior v. Anderson, 130 Cal. 290, 62 Pac. 563; S. C., 138 Cal. 716, 72 Pac. 349.

59 Barrows v. Fox, 98 Cal. 63, 32 Pac. 811.

60 Roeder v. Stein, 23 Nev. 92, 42 Pac. 867.

61 Nephi Irr. Co. v. Vickers (Utah), 81 Pac. 144.

62 Lower Kings River etc. Ditch Co. v. Kings etc. Co., 60 Cal. 408.

63 Clark v. Willett, 35 Cal. 534, at 549.

§ 129. **The Ditch, etc., is an Easement.**—That a ditch is an easement has been frequently declared.[64] The essence of the right to a ditch is the right of way to conduct water over another's land and there is no ownership of the land itself, and the ditch is not land.[65] In view of this case holding that a ditch is not land, it would seem that ejectment would not lie for a ditch. There is, however, an early case[66] holding that ejectment would lie for a ditch, and it has been frequently cited and relied on.[67]

Changes that are burdensome to the servient tenement cannot be made, following the usual law of easements.[68] The rights and duties of repair follow the law of easements.[69] The right to maintain a ditch arises like any easement, and if on public land, it arises by governmental grant, on the same principle that the water right itself is a grant; and the burden of the ditch attaches to the land if the land later passes into private

64 Among other cases: Gregory v. Nelson, 41 Cal. 278; Campbell v. West, 44 Cal. 646; Quinlan v. Noble, 75 Cal. 250, 17 Pac. 69; Allen v. San Jose etc. Co., 92 Cal. 138, 28 Pac. 215, 15 L. R. A. 93; Bean v. Stoneman, 104 Cal. 49, 37 Pac. 777, 38 Pac. 39; Burris v. People's Ditch Co., 104 Cal. 248, 37 Pac. 922; Mesnager v. Englehardt, 108 Cal. 68, 41 Pac. 20; Joseph v. Ager, 108 Cal. 517, 41 Pac. 422; Dixon v. Schermeier, 110 Cal. 583, 42 Pac. 1091; Jacob v. Day, 111 Cal. 571, 44 Pac. 243; North Fork etc. Co. v. Edwards, 121 Cal. 662, 54 Pac. 69; Los Angeles v. Pomeroy, 125 Cal. 240, 58 Pac. 69; Mayberry v. Alhambra etc. Co., 125 Cal. 444, 54 Pac. 530, 58 Pac. 68; Oliver v. Agasse, 132 Cal. 297, 64 Pac. 401.

65 Mt. Carmel Fruit Co. v. Webster, 140 Cal. 183, 73 Pac. 826: *contra*, Reed v. Spicer, 27 Cal. 57.

66 Reed v. Spicer, 27 Cal. 57.

67 In Pomeroy on Riparian Rights, sec. 57; Kinney on Irrigation, sec. 224; Integral etc. Co. v. Altoona etc. Co., 75 Fed. 379, 21 C. C. A. 409. But compare Swift v. Goodrich, 70 Cal. 103, 11 Pac. 561. The facts of the Mt. Carmel case are stated, *ante*, sec. 120.

68 *Infra*, secs. 134, 148.

69 *Infra*, sec. 135.

title.[70] But a ditch cannot be maintained over private land without the consent of the land owner, unless by prescription.[71] Miners cannot any more than others—there is no more partiality to miners in building ditches than in appropriating the water.[72] The right of way may, however, be taken on eminent domain proceedings.[73]

§ 130. **Ditch and Water Right Distinguished.**—The water right itself, as a use and flow, is not an easement. It is a parcel of the public land severed therefrom by grant, a thing in itself, not a servitude upon some other thing; whereas the right to a ditch or other artificial watercourse is an easement.[74] "The right to the use of water in a natural stream is in no sense an easement, but its use by diversion, in an artificial watercourse, is strictly an easement."[75] Consequently a grant of a right of way for a ditch does not necessarily include a conveyance of a right to take water from the stream from which the ditch is built.[76] An injury to a water right cannot be proved under a count for an injury to the ditch, or *vice versa*.[77] A canal may well be granted,

70 U. S. Rev. Stats., secs. 2339, 2340; Gregory v. Nelson, 41 Cal. 278; Smith v. Hawkins, 110 Cal. 122, 42 Pac. 453; Jacob v. Day, 111 Cal. 571.

71 Weimer v. Lowery, 11 Cal. 104; Titcomb v. Kirk, 51 Cal. 288; Los Angeles v. Pomeroy, 125 Cal. 420, 58 Pac. 69.

72 Bliss v. Kingdom, 46 Cal. 651; Titcomb v. Kirk, 51 Cal. 288.

73 *Infra*, chapter XII.

74 See Zimmler v. San Luis Co., 57 Cal. 221; McLear v. Happood, 85 Cal. 555, 24 Pac. 788; Natoma etc. Co. v. Hancock, 101 Cal. 42, 31 Pac. 112, 35 Pac. 334 (*semble contra*); Dixon v. Schermeier, 110 Cal. 582, 42 Pac. 1091; Jacob v. Day, 111 Cal. 571, 44 Pac. 243; Mayberry v. Alhambra etc. Co., 125 Cal. 440, 54 Pac. 530, 58 Pac. 68. See, also, *ante*, sec. 43.

75 Yale on Mining Claims and Water Rights, p. 204.

76 Zimmler v. San Luis Co., 57 Cal. 221.

77 Nevada etc. Co. v. Kidd, 37 Cal. 282.

reserving the water right.[78] An abandonment of a ditch does not necessarily include an abandonment of the owner's water right.[79]

The water right, however, though entirely a distinct thing from the ditch, may be an appurtenance to a given ditch or the ditch to the water right, if used specifically in connection therewith. In such a case, the water right will pass as an appurtenance in the conveyance of the ditch.[80] In Reynolds v. Hosmer, 51 Cal. 205, the ditch was built in two parts, which were separately sold on foreclosure of a mechanic's lien. It was held that the water right passed as an appurtenance to the upper part, and the owner of the lower part has no water right.[81] Where, however, the ditch is not made up of distinct parts, the water right is appurtenant to every part of the ditch, however long.[82] In this case the rule is applied to allow suit in one county or State through which the ditch runs, for diversion of the water in another county or State, in which the water entered the ditch. There would seem to be a conflict between this rule that a water right is appurtenant to the ditch, and the rule of Nevada etc. Co. v. Kidd, *supra,* that an injury to the water right (diversion) cannot be proven under a count for injury to the ditch.

In Jacobs v. Lorenz[83] the court says the water right is the principal, and if either is appurtenant to the other, the ditch is appurtenant to the water right.[84]

78 Rogers v. Riverside etc. Co., 132 Cal. 9, 64 Pac. 95.

79 Nichols v. McIntosh, 19 Colo. 22, 34 Pac. 278.

80 Lower etc. Co. v. Kings etc. Co., 60 Cal. 408; Williams v. Harter, 121 Cal. 47, 53 Pac. 405.

81 Accord 6 Wall. 561.

82 Lower Kings River etc. Co. v. Kings etc. Co., 60 Cal. 408; Willey v. Decker, 11 Wyo. 496, 100 Am. St. Rep. 939, 73 Pac. 210.

83 98 Cal. 332, 33 Pac. 119.

84 See cases collected in the note to 65 L. R. A. 407.

§ 131. **The Water Flowing in Artificial Watercourse is Personalty.**—That the water flowing in a ditch or other artificial watercourse or appliance is personalty was recognized in numerous cases.[85] The ditch owner is said to have title to the very body of water there flowing, as distinguished from the mere use and flow of the water right itself.[86] The water in a ditch being in the owner's possession, and under his control, becomes his personal property.[87] The only California case where the point was actually decided, however, is the case of Heyneman v. Blake, 19 Cal. 579. The court, in deciding that a corporation organized to sell water was organized for trade or commerce, said: "Water, when, collected in reservoirs or pipes, and thus separated from the original source of supply, is personal property and as much the subject of sale as an article of commerce—as ordinary goods and merchandise."[88]

85 Kidd v. Laird, 15 Cal. 161, at 180, 76 Am. Dec. 472 (*dictum*); Heyneman v. Blake, 19 Cal. 579; Nevada etc. Co. v. Kidd, 37 Cal. 282, at 326 (*dictum*); Parks v. Hoyt, 57 Cal. 44 (*semble*); Green v. Carotta, 72 Cal. 267, 13 Pac. 685 (*dictum*); Riverside etc. v. Gage, 89 Cal. 410, 26 Pac. 889 (*dictum*); Ball v. Kehl, 95 Cal. 606, at 613, 30 Pac. 780 (*dictum*); McGuire v. Brown, 106 Cal. 660, 39 Pac. 1060, 30 L. R. A. 384; Dunsmuir v. Port Angeles etc. Co., 24 Wash. 104, 63 Pac. 1095; Boise City etc. Co. v. Stewart (Idaho), 77 Pac. 25.

86 Green v. Carotta, 72 Cal. 67; McGuire v. Brown, 106 Cal. 660, 39 Pac. 1060, 30 L. R. A. 384.

87 Ball v. Kehl, 95 Cal. 606, at 613, 30 Pac. 780.

88 The only expression opposed to this is that in Fudickar v. East Riverside etc. Co., 109 Cal. 28, at 36, 41 Pac. 1024, where the water flowing in a canal is considered as an appurtenance to the canal and hence realty. The court said:

"So long as the water flows in its natural channel it is undoubtedly real property, and while flowing by right through a canal or pipe, which is real property, and owned by the owner of the water, it is appurtenant to the canal or pipe, and, therefore, real property (Civ. Code, secs. 658, 662)."

But the court clearly had in mind the water right and not "the very body of water" in the canal. As we have seen, the water

§ 132. The Law of Natural Waters does not Apply to Artificial Watercourses.—As the water in a ditch is personal property, owned by the ditch owner as completely as other personal property, the landowner through whose land the ditch runs can claim no riparian rights therein.[89] Nor is it subject to appropriation by others.[90] A use by another of waste water discharged from a ditch can give rise to neither an appropriation nor to a right by prescription, or estoppel, to have the discharge kept up, even though expensive ditches and flumes were built for the purpose of utilizing such waste.[91] In Stockman v. Riverside etc. Co., 64 Cal. 57, at 59, 28 Pac. 116, the court says on this point:

"We have been cited to no authority, and know of none that holds that the bare fact that the ditch was constructed with the knowledge of the plaintiffs and their grantors, and without objection on their part, though at heavy cost, is sufficient to operate an estoppel. There must be some degree of turpitude in the conduct of a party before a court of equity will estop him

right may be appurtenant to the canal; but the water itself therein is personalty.

89 Creighton v. Kaweah Co., 67 Cal. 221, 7 Pac. 658; Green v. Carotta, 72 Cal. 267, 13 Pac. 685.

90 Cardelli v. Comstock etc. Co., 26 Nev. 284, 66 Pac. 950—water from Sutro tunnel. Compare, however, Oklahoma Stats. 1905, p. 224, sec. 45; South Dakota Stats. 1905, p. 201, sec. 56.

91 Dougherty v. Creary, 30 Cal. 290, 89 Am. Dec. 116; Stone v. Bumpus, 40 Cal. 428; Hanson v. McCue, 42 Cal. 303, 10 Am. Rep. 299; Correa v. Frietas, 42 Cal. 339; Stockton v. Riverside etc. Co., 64 Cal. 57, at 59, 28 Pac. 116; Anaheim etc. Co. v. Semi-Tropic etc. Co., 64 Cal. 185, 30 Pac. 623; Lux v. Haggin, 69 Cal. 255, at 266, 10 Pac. 674, disapproving Parke v. Kilham, 8 Cal. 77, 68 Am. Dec. 310, on this point; Lakeside Ditch Co. v. Crane, 80 Cal. 181, 22 Pac. 76; Hargrave v. Cook, 108 Cal. 72, 41 Pac. 18. See Yale on Mining Claims and Water Rights, 201. Accord Cardelli v. Comstock Co., 26 Nev. 284, 66 Pac. 950; Fairplay etc. Co. v. Weston, 29 Colo. 125, 93 Am. St. Rep. 719, note, 67 Pac. 160.

from the assertion of his title—the effect of the estoppel being to forfeit his property, and transfer its enjoyment to another. (Boggs v. Merced Mining Co., 14 Cal. 368.)" This is in accord with the leading English case of Arkwright v. Gell, 5 Mees. & W. 226.

The distinction between the artificial watercourse (and the water in it) and the water right in the natural stream must be kept in mind. Those who claim as appropriators of the natural stream, as in the usual case of successive appropriators, are fully protected. The rule that lower claimants can acquire no rights in the discharge applies only to artificial watercourses.[92]

An adverse use of the ditch itself, or of the water in it before its discharge, will give rise to a prescriptive right.[93] The question of adverse use of artificial watercourses in cases where the water is itself collected artificially, as in the case of water pumped from a mine and run off in a ditch, is discussed in the books cited in the preceding note. It is a refinement that we need not here go into, as we are dealing only with water naturally existing in a stream or other natural body, originally.

A recent case in this connection may, however, be mentioned. It arose out of the waters flowing from the Sutro tunnel, below Virginia City, Nevada. Plaintiff used waste water that was being pumped from the Comstock mines, and discharged in large volume through the Sutro tunnel, which has been built to drain those mines. This discharge, the court held, was an artificial stream, and not subject to appropriation by others. The court put this case:

92 See Brown v. Mullin, 65 Cal. 89, 3 Pac. 99; Ball v. Kehl, 95 Cal. 606, 30 Pac. 780; Last Chance Co. v. Bunker Hill Co., 49 Fed. 430.

93 *Infra*, sec. 194 et seq. See Yale on Mining Claims and Water Rights, p. 202 et seq.; Blanchard and Weeks on Mining Claims and Water Rights, p. 822.

"One further illustration: A, by artificial means, fills a tank or reservoir on his own land to-day, and permits the waters to flow down to B's land and irrigate B's land. Probably A's conduct gives to B the right to that water—that individual tank or reservoir full. But suppose A fills the same tank or reservoir to-morrow, but chooses to use this water—this tank or reservoir full—to irrigate his own land; what right has B to this last water? We think none, and it makes no material difference if such a state of things were kept up for a long number of years. In such case, time would raise no presumption of grant, and A could at any time stop the production of such artificial and temporary stream; and he could also, at any time, if he continued the production of such stream, put the waters thereof to his own use."[94] In this case, counsel argued "That such waters are just as absolutely the property of the corporation defendant as if such water were manufactured each day from oxygen and hydrogen by the corporation defendant."

§ 133. **Natural Dry Ravines as Artificial Watercourses.**—The peculiar necessities of mining gave rise to many cases where a stream was diverted, ditched to a dry ravine, and allowed to run down there as a link in a ditch line, to convey the water to the place of use. This may well be done.[95] In such cases, the dry ravines and the water in it are treated on the principles of artificial watercourses, like ditches,[96] and the water in it likewise as personalty.[97]

94 Cardelli v. Comstock T. Co., 26 Nev. 284, 66 Pac. 950.

95 *Infra*, sec. 187.

96 Richardson v. Kier, 34 Cal. 63, 91 Am. Dec. 681.

97 Parks Canal & Min. Co. v. Hoyt, 57 Cal. 44. See, also, *infra*, sec. 187.

§ 134. **Changes in Ditches, etc.**—As the right to the ditch or other artificial watercourse is an easement, no change can be made that is burdensome to the servient tenement, or that changes the character of the servitude. At the present day it is important to note that consequently a ditch cannot be changed to a pipe-line, because it is held to be a material change in the character of the servitude.[98] And, in general, a change that is to the disadvantage of the servient tenement cannot be made without permission.[99]

In a case just decided by the supreme court of California[99a] it is said:

"We need not here discuss the question as to whether defendants might lawfully have constructed a ditch of the same size as their flume along their flume line. (See, however, Allen v. San Jose Land & Water Co., 92 Cal. 138; Barrows v. Fox, 98 Cal. 63, 66.)

"They constructed this ditch upon another line, and for this purpose, they appropriated to their use different land of plaintiff.

"The precise location of the right of way had been as definitely and finally fixed by the acts of the defendants as it would have been had the meets and bounds been set forth in an instrument of grant. (See 14 Cyc. Law & Pr., pp. 1161, 1205.) Defendants had acquired the right to that precise location and no other. The remainder of plaintiff's land was his, free from any right of defendants. We know of no principle of law that

98 Allen v. San Jose Water Co., 92 Cal. 138, 28 Pac. 215, 15 L. R. A. 93; Oliver v. Agasse, 132 Cal. 297, 64 Pac. 401. *Contra,* Bean v. Stoneman, 104 Cal. 49, 37 Pac. 777, 38 Pac. 39.

99 Burris v. People's Ditch Co., 104 Cal. 248, 37 Pac. 922; Joseph v. Ager, 108 Cal. 517, 41 Pac. 422; Jacob v. Day, 111 Cal. 571, 44 Pac. 243; North Fork etc. Co. v. Edwards, 121 Cal. 662, 54 Pac. 69; Los Angeles v. Pomeroy, 125 Cal. 420, 58 Pac. 69; Vestal v. Young, 148 Cal. ——, 30 Cal. Dec. 313, 317, Sept. 16, 1905.

99a Vestal v. Young, 148 Cal. ——, 30 Cal. Dec. 313, 317.

would warrant defendants in subjecting, without his consent, another and different portion of his land to their use, even although they abandoned their former location. It is elementary that the location of an easement of this character cannot be changed by either party without the other's consent, after it has once been finally established, whether by the express terms of a grant, or by acts of the parties tantamount in their effect. (See Jagui v. Johnson, 27 N. J. Eq. 526, 552.) The granting of a right over one portion of a person's land, gives the grantee no right over any other portion. Where such a grantee attempts to exercise his right over some other portion, by subjecting such portion to his use, without the consent of the owner, he deprives the owner of the free use and possession thereof, and his acts, if continued the requisite time, will ripen into an easement, and the owner will be permanently deprived of his property. That such a result injuriously affects the rights of the owner cannot well be questioned. As was said in Brown v. People's Ditch Co. (104 Cal. 248): 'It is well settled that the owner of an easement cannot change its character, or materially increase the burden upon the servient estate, or injuriously affect the rights of other persons.'

"It is entirely immaterial in this connection that the new line was only from one to twenty feet distant from the old line. It was upon property of plaintiff, over which defendants had no right whatever, and the principle is the same as if the new line had been hundreds of feet away from the old one."

The ditch owner, likewise, cannot be forced to make a change by the landowner. The latter cannot force the former to substitute a pipe-line for his ditch,[100] even though the pipe-line would be a more efficient way

100 Gregory v. Nelson, 41 Cal. 278.

of handling the water, minimizing loss in transmission.[101]

Changes that do not work to the disadvantage of the rights of others may, however, be made.[102]

§ 135. **Repair of Ditches.**—As in the case of any easement, the ditch owner, as the dominant, has the duty of keeping the ditch in repair, and not the landowner.[103] Correspondingly he has a right of entry upon the servient estate to make the repairs.[104] The landowner, on his part, cannot remove the lateral or subjacent support to which the ditch is entitled.[105] Otherwise he is free to use his land in the ordinary way, such as for pasturing sheep, though they trample the ditch. It is the ditch owner's duty to keep the ditch in repair against damage from the ordinary use of the land by the landowner.[106] Where ditch crosses ditch, the later claimant must adjust the crossings so as not to interfere with the prior ditch.[107]

§ 136. **Damage from Breaking Ditches, etc.**—The use by means of ditches, flumes, etc., is, of course, the most usual, and using the water in this way does not, by any means, make the appropriator an insurer of others against damage from breaking, overflow, seepage, or

101 Barrows v. Fox, 98 Cal. 63, 32 Pac. 811.

102 Cal. Civ. Code, sec. 1415. See *supra*, sec. 126 et seq.

103 Fraler v. Sears etc. Co., 12 Cal. 556, 73 Am. Dec. 562; Richardson v. Kier, 34 Cal. 63, 91 Am. Dec. 681; Richardson v. Kier, 37 Cal. 263; Durfee v. Garvey, 78 Cal. 546, 21 Pac. 302; Bean v. Stoneman, 104 Cal. 49, 37 Pac. 777, 38 Pac. 39.

104 Pico v. Colimas, 32 Cal. 578; Ware v. Walker, 70 Cal. 591, 12 Pac. 475.

105 Gregory v. Nelson, 41 Cal. 278; Lorenz v. Waldron, 96 Cal. 243, 31 Pac. 54.

106 Durfee v. Garvey, 78 Cal. 546, 21 Pac. 302.

107 Jennison v. Kirk, 98 U. S. 453, 25 L. ed. 240.

other escape of the water. The famous English case of Fletcher v. Rylands, L. R. 1 Ex. 265, L. R. 3 H. L. 330, declared that a man builds a reservoir, or other works to hold water, at his peril. But such is not the law in the West.[108] The ditch owner is not liable merely because the break, etc., occurred, but only if it occurred through his negligence. Negligence must be shown.[109] It is not even a case of *res ipsa loquitur*, and negligence is not presumed from the mere fact that a break, etc., occurred.[110] The ordinary rule of negligence that there must be a failure to use the care which an ordinary prudent man would have taken under the circumstances applies.[111] A flood resulting from an unprecedented rainstorm causes no liability,[112] but floods that are of periodical occurrence must be guarded against by the ditch owner, as it is possible to take precautions against floods of that kind.[113] In the latter case cited in the foregoing note the court says:

"The injury complained of occurred in a season of high water caused by the melting of the snow on the mountains above. The overflow so caused is periodical, and may be, and is, anticipated by all persons inhabiting the regions where the alleged damage occurred.

108 Tenney v. Miners' Ditch Co., 7 Cal. 335; Hoffman v. Tuolumne etc. Co., 10 Cal. 413; Everett v. Hydraulic Co., 23 Cal. 225; Campbell v. Bear River Co., 35 Cal. 679; Howell v. Big Horn Basin etc. Co. (Wyo.), 81 Pac. 785, citing cases; Pomeroy on Riparian Rights, sec. 72. See 81 Am. St. Rep. 492, note; Blanchard and Weeks on Mining Claims and Water Rights, 748.

109 Todd v. Cochell, 17 Cal. 98; Richardson v. Kier, 34 Cal. 63, 91 Am. Dec. 681.

110 Tenney v. Miners' etc. Co., 7 Cal. 335.

111 Wolf v. St. Louis etc. Co., 10 Cal. 541, and cases just cited. Cf., also, Parker v. Gregg, 136 Cal. 413, 69 Pac. 22.

112 Mathews v. Kinsell, 41 Cal. 512; Chidester v. Consolidated Ditch Co., 59 Cal. 197.

113 Turner v. Tuolumne etc. Co., 25 Cal. 397; Chidester v. Consolidated Ditch Co., 59 Cal. 197.

The obligation rested on defendant to keep the banks of its canal in repair. It was bound to use ordinary diligence for this purpose. The diligence required, however, must be commensurate with the duty, and the duty is that ordinarily employed by a prudent business man when dealing with his own affairs under the circumstances which surround him and call his mind and energy into action."

In another case it is said: "If the defendant was not bound to provide against unheard-of floods, he was at least bound to provide against such as had occurred not more than three years prior to the construction of the ditch."[114]

The ditch owner is not liable for damage from leakage caused by the activity of some burrowing animal.[115]

§ 137. **Contracts Concerning Ditches.**—There is no limitation upon the right to deal with or dispose of this kind of property, and the usual law of contracts applies. A few cases, however, are worth stating here. A covenant to allow a neighbor to take the water from a stream and build two ditches across one's land, runs with the land.[116] A sale of a ditch may carry with it a water right as an appurtenance;[117] but a grant may be made of a canal reserving the water right;[118] and a water right will not always pass as an appurtenance with the grant of a ditch right if such was not the intent.[119] Ditches and water rights are subject to me-

114 Burbank v. West Walker River Ditch Co., 13 Nev. 431.

115 Tenney v. Miners' etc. Co., 7 Cal. 335.

116 Weill v. Baldwin, 64 Cal. 476, 2 Pac. 249.

117 *Supra*, sec. 122.

118 Rogers v. Riverside etc. Co., 132 Cal. 9, 64 Pac. 95.

119 Zimmler v. San Luis etc. Co., 57 Cal. 221.

chanics' liens,[120] or execution,[121] or mortgage.[122] A parol sale of a ditch, together with a water right, would seem to be effectual if the vendee took possession,[123] though there might be some difficulty if sold separately.

A parol contract to furnish water "at all times" is void under the statute of frauds as a contract not to be performed within a year. (Metropolitan etc. Co. v. Topeka etc. Co. (Kan.), 132 Fed. 702.)

C. LIMITATIONS ON QUANTITY OF WATER.

§ 138. The appropriator is limited to the quantity first appropriated, and he cannot divert more than that as against subsequent appropriators.[124] In determining this amount, the following considerations are given special weight.

§ 139. **No More than Originally Claimed.**—By the early cases before the code in California the appropriator was limited to the amount originally claimed, and the amount claimed was determined largely from the means used, and the purpose intended,[125] and such would still be the rule in California for an appropriator by actual diversion, the code formalities not being followed. An appropriation made under the present statutes of all States, however, requires the amount claimed to be specially stated in the notice or in the application for permit, and is limited to that as the maximum.[126]

120 Reynolds v. Hosmer, 51 Cal. 205.

121 Gleason v. Hill, 65 Cal. 17, 2 Pac. 413.

122 Cave v. Crafts, 53 Cal. 135.

123 *Supra*, sec. 123.

124 Senior v. Anderson, 115 Cal. 496, 47 Pac. 454; Union etc. Co. v. Dangberg, 81 Fed. 73; Becker v. Marble Creek etc. Co., 15 Utah, 225, 49 Pac. 892, 1119, and cases *infra*.

125 White v. Todd's Valley etc. Co., 8 Cal. 443, 68 Am. Dec. 338; Ortman v. Dixon, 13 Cal. 33; McDonald v. Bear River etc. Co., 13 Cal. 220; McKinney v. Smith, 21 Cal. 374.

126 See *ante*, chapters VI and VII.

§ 140. **No More Than Capacity of Ditch.**—The appropriator, by claiming more than he actually diverts, gets no right to divert the surplus later as against subsequent claimants; and hence, the capacity of his ditch, if less than the amount claimed, limits the amount to which he is entitled, allowing a reasonable time after completion of the ditch to remove boulders or other obstructions.[127] The quantity of water appropriated is measured by the capacity of the ditch at the smallest point, as determined by evidence of size and grade.[128]

§ 141. **No More Than Actually Used for a Beneficial Purpose.**—The appropriator is not even entitled to the quantity actually diverted, if he uses only a portion of it; his right is limited to the amount so actually used.[129]

In calculating the amount actually used, the amount lost in necessary fluming must be added, even though

127 White v. Todd's etc. Co., 8 Cal. 443, 68 Am. Dec. 338; Ortman v. Dixon, 13 Cal. 33; McKinney v. Smith, 21 Cal. 374; Posachane etc. Co. v. Standart, 97 Cal. 476, 32 Pac. 532; Bean v. Stoneman, 104 Cal. 49, 37 Pac. 777, 38 Pac. 39; Senior v. Anderson, 115 Cal. 496, 47 Pac. 454; San Luis etc. Co. v. Estrada, 117 Cal. 168, 48 Pac. 1075; Pomeroy on Riparian Rights, secs. 80, 81; Kinney on Irrigation, secs. 162, 166. See 60 Am. St. Rep. 808, note, 814, note.

128 Ophir S. M. Co. v. Carpenter, 6 Nev. 393; Barnes v. Sabron, 10 Nev. 217.

129 White v. Todd's etc. Co., 8 Cal. 443, 68 Am. Dec. 338; Doughtery v. Haggin, 61 Cal. 305; Barrows v. Fox, 98 Cal. 63, 32 Pac. 811; Riverside etc. Co. v. Sargent, 112 Cal. 230, 44 Pac. 560; Santa Paula etc. Works v. Peralta, 113 Cal. 38, 45 Pac. 168; Senior v. Anderson, 115 Cal. 496, 47 Pac. 454; Smith v. Hawkins, 120 Cal. 86, 52 Pac. 139; Senior v. Anderson, 130 Cal. 290, at 297, 62 Pac. 563; Bledsoe v. Decrow, 132 Cal. 312, 64 Pac. 397; Strong v. Baldwin, 137 Cal. 432, 70 Pac. 288; Union etc. Co. v. Dangberg, 81 Fed. 73; Simpson v. Williams, 18 Nev. 43, 4 Pac. 1213. Cases accord cited in 17 Ency. of Law, 503; Kinney on Irrigation, secs. 162, 166, 230; 60 Am. St. Rep. 799, note.

there would be no loss if the water were transported in some other way as, for example, by a pipe-line.[130]

One using only an insignificant quantity of water for watering a garden patch cannot later claim that he has a right to enough water to irrigate a farm.[131]

As the amount is limited by beneficial use, a decree which, in effect, allows respondents all the water their ditch will carry during the irrigating season of each year, irrespective of its necessity, and which enjoins others from interfering therewith, is erroneous.[132] The injunction should, it seems, contain a qualification "while the full capacity is being put to beneficial use."

In one case the court says: "Perhaps the appellant's counsel is of the belief that the plaintiff, having made the first appropriation, is entitled to have the water come down to him to the extent of his appropriation, whether he has use for it or not. If so, he is mistaken. Water is too precious in this arid climate to permit its being unnecessarily wasted."[133] The appropriator is limited to the amount beneficially used because waste is not tolerated. This is a proposition already discussed at length.[134] The whole system aims to prevent the obvious danger that a few appropriators might monopolize the whole stream in the rough sense of that word. An appropriation gives an exclusive right, but does not tolerate selfish monopoly; it is on this account that a statute setting up the law of appropriation in Nebraska was held not to be within a constitutional prohibition against monopolies.[135]

130 Barrow v. Fox, 98 Cal. 63, 32 Pac. 811.

131 San Luis etc. Co. v. Estrada, 117 Cal. 168, 48 Pac. 1075.

132 Gotelli v. Gardelli, 26 Nev. 382, 69 Pac. 8.

133 Roeder v. Stein, 23 Nev. 92, 42 Pac. 867.

134 *Ante*, sec. 127.

135 Farmers' Irr. Dist. v. Frank (Neb.), 100 N. W. 286; cf. Munroe v. Ivie, 2 Utah, 535.

§ 142. **Whole Stream.**—If for a beneficial purpose, one may appropriate the whole stream. In times of natural or other deficiency, also, the prior appropriator may still claim his full amount; the loss must fall on the later appropriators.[136] This is in marked contrast to the doctrine of riparian rights, where all claimants have an equal right, and, in time of deficiency, the water would be apportioned among them.[137] In Colorado and some other States, however, the appropriators will be forced, under some circumstances, to pro-rate,[138] by statute, and priority is given in those States in times of scarcity to those using the water for domestic purposes; next to those using it for irrigation.[139]

Says Kinney on Irrigation:[140] "A great many of our Western streams become nearly dry in the summer just when the water is most needed for irrigation. And so, if a certain stream in the springtime has a flow of five hundred inches, and in the summer time the flow is reduced to one hundred inches or less, and A, as the first appropriator upon the stream, has legally completed his appropriation of two hundred and fifty inches . . . . he is entitled, as regards all subsequent claimants to the water, either above or below him on the stream, to all of the water that flows in it during the period that it is equal to two hundred and fifty inches or less, although he entirely shuts off the supply of subsequent appropriators. This may seem a selfish rule to one who is acquainted with only the principles of the common law upon the subject, but it is based upon the general and uniform principle applicable to all claims by

136 Compare Brown v. Smith, 10 Cal. 508.

137 *Infra*, sec. 213.

138 Farmers' etc. Co. v. White, 32 Colo. 114, 75 Pac. 415.

139 See Appendix and *infra*, sec. 144.

140 Sec. 225.

appropriation to waters upon the public domain of the arid West that 'he who has the prior has the superior right.' "[141]

§ 143. **Where No Other Claimants.**—As against subsequent appropriators not existing at the time of the enlargement of one's claim, the enlargement may, of course, be made, just as a new appropriation could be made; being in accord with the established doctrine of priority.[142]

§ 144. **Preferences and Pro-rating.**—Special provisions for times of scarcity usually appear in the irrigation codes of the arid States. Domestic use is first supplied; and next, irrigation, and then all other uses.[143] In Colorado this preference is enforced by a provision that if water appropriated for domestic use is used for irrigation to any extent whatever, it is a misdemeanor.[144] Further provisions in Colorado give the water commissioners power in time of deficiency to pro-rate the water in volume or in time.[145] In Utah, the water is pro-rated yearly when the water reaches its annual low-water mark, as though priorities were the same.[146] In the Idaho constitution, it is declared that in times of scarcity, domestic uses shall be supplied first; second, min-

141 See, also, secs. 173, 229, 240; Sayre v. Johnson (Mont.), 81 Pac. 389; Kirk v. Bartholomew, 3 Idaho, 367, 29 Pac. 40, and the emphatic opinion in Hillman v. Hardwick, 3 Idaho, 255, 28 Pac. 438. Accord Long on Irrigation, sec. 57.

142 Beaver etc. Co. v. St. Vrain etc. Co., 6 Colo. App. 130, 40 Pac. 1066, and cases *passim*.

143 Colo. Const., art. 16, sec. 6; Neb. Comp. Stats., 6451; Utah Stats. 1905, c. 108, sec. 54; and see statutes of other States in Appendix.

144 3 M. A. S., 1905 ed., 2269a.

145 M. A. S. 2259, 2267.

146 Stats. 1905, c. 108, sec. 54. See Appendix.

ing (in organized mining districts); third, agricultural; and fourth, manufacturing.[147] Similar provisions exist in statutes of some of the other arid States. (See Appendix.)

§ 145. **Appropriation for Future Needs.**—In considering the amount of water to which an appropriator is entitled, there is a decided tendency to introduce a new feature to meet the requirements of irrigation. If we have correctly stated the history and principles so far, the system of appropriation aims fundamentally at definiteness and certainty. It allowed the prior appropriator to take what he wanted and do with it what he wanted, if he let the world know, so that later comers would have to take things as they found them, and would know what they could take. Consequently, later appropriators had to look solely at the amount the prior appropriator was actually applying to a beneficial purpose at the time the subsequent claimant arrived. For any enlargement of amount used thereafter the prior claimant had to take his chances with others at the time he sought to increase the amount.

But while in mining a fixed amount may usually be sufficient from the start for all purposes, in irrigation of newly settled land it will not. The need for water grows as the area cultivated grows. The settler can cultivate, perhaps, only a few acres the first year; but he does everything with a view to later expansion. Before his larger acreage is cleared and planted, however (which may take several years), other claimants to the use of the water have arrived. Does the law allow the former to continue increasing his supply in the face of these later claimants?

147 Art. 15, sec. 3.

The tendency is strong to hold that it does. The amount used need not be a fixed constant quantity. The amount used is still a limit as previously set forth. But it is a variable limit, which may gradually increase as the irrigator's needs increase. In California this principle was affirmed in Senior v. Anderson, 115 Cal. 496, 47 Pac. 454, though the enlargement was not upheld on the facts of the case. There seems no other California decision on the point, the court relying on Oregon cases. In other jurisdictions, however, the principle has been repeatedly affirmed—Oregon,[148] Montana,[149] Colorado,[150] Idaho,[151] and Utah.[152]

§ 146. **Same.**—There are limitations on this principle of figuring future needs in the amount an appropriator can hold against later claimants.

First, he can hold this future-needed amount only for a reasonable time; if he holds it, without using it, longer than is reasonable under the circumstances of each case, the right to it is lost by abandonment. Four years were held to be an unreasonable time in Senior v. Anderson, *supra*, on the facts of that case, saying: "We do not hold that the Hines appropriation is limited by the quantity of water he could put to a useful purpose upon his land the first or second year, but to

148 Nevada Ditch Co. v. Bennett, 30 Or. 59, 60 Am. St. Rep. 777, 45 Pac. 472, citing cases and thoroughly reviewing the matter; Glaze v. Frost, 44 Or. 29, 74 Pac. 336.

149 Kleinschmidt v. Greiser, 14 Mont. 484, 43 Am. St. Rep. 652, 37 Pac. 5; Arnold v. Passavant, 19 Mont. 575, 49 Pac. 400.

150 New Mercer etc. Co. v. Armstrong, 21 Colo. 357, 40 Pac. 989.

151 Hall v. Blackman, 8 Idaho, 272, 68 Pac. 19.

152 Eliot v. Whitmore, 23 Utah, 342, 90 Am. St. Rep. 700, 65 Pac. 70. See, also, Rodgers v. Pitt, 129 Fed. 923, per Judge Hawley, and Kinney on Irrigation, secs. 238, 668a. Compare the *dicta* in Barnes v. Sabron, 10 Nev. 217, and Union Min. Co. v. Dangberg, quoted *ante*, sec. 22.

such quantity as he could put to a useful purpose upon his land, within a reasonable time by the use of reasonable diligence. . . . . We think that the time elapsing after 1883[153] was ample to bring under cultivation all the land upon the Hines place intended for cultivation by the use of water." Ten years have been held too long;[154] thirteen years;[155] eighteen years.[156] On the other hand, seven years have been held a reasonable time;[157] thirteen years;[158] fourteen years.[159] In California, there is ground for saying that five years will be a limit. In Smith v. Hawkins, 110 Cal. 122, 42 Pac. 453,[160] it was laid down as a general proposition in California that in all cases the right is lost by forfeiture if there is a failure for five years to apply the water to a beneficial use.[161]

Second, the future enlargement cannot exceed the original capacity of the ditch. Among the settled propositions of the law of appropriation, Judge Hawley[162] includes the following: "That if the water is used for the purpose of irrigating lands owned by the appropriator, the right is not confined to the amount of water used at the time the appropriation is made; that the ap-

153 To 1887.

154 Hindman v. Rizor, 21 Or. 112, 27 Pac. 13.

155 Low v. Rizor, 25 Or. 551, 37 Pac. 82.

156 New Mercer etc. Co. v. Armstrong, 21 Colo. 357, 40 Pac. 989.

157 Moss v. Rose, 27 Or. 595, 50 Am. St. Rep. 743, 41 Pac. 666.

158 *Semble*, Rodgers v. Pitt, 129 Fed. 932.

159 *Semble*, Hall v. Blackman, 8 Idaho, 272, 68 Pac. 19.

160 The case of Smith v. Hawkins is quoted and considered again later, *infra*, secs. 190, 193.

161 Compare the following: An appropriator using twenty-five inches entered into a contract reserving his "present right." It was held that water for future needs was not reserved under "present right": Southside etc. Co. v. Burson (Sup. Ct. Cal.), L. A. No. 1383, Aug. 1, 1905, 148 Cal. ——.

162 In Union etc. Co. v. Dangberg, 81 Fed. 73; quoted *ante*, sec. 22. The italics are ours.

propriator is entitled not only to his needs and necessities at that time, but to such other and further amount of water, *within the capacity of his ditch* as would be required for the future improvement and extended cultivation of his land, if the right is otherwise kept up."

Third, the future needs must have been in mind at the time the appropriation was originally made, and not a mere after-thought;[163] that is, the enlarged use must be part of an original policy of expansion.[164]

Fourth, probably, until the appropriator's future needs have become present needs and the extra amount is actually used, others may use the water temporarily.

Some general quotations may be added. In Arnold v. Passavant,[165] the appropriation was made for one hundred and eighty acres, but only forty-five were cultivated at the time a later claim was initiated. The prior claim for enough to irrigate one hundred and eighty acres was upheld, the evidence being "that he cultivated his land and used water to irrigate it, as he and his partner got money in their pockets."[166] In Hall v. Blackman[167] the court says: "The history of irrigation in this State shows that the public lands have generally been taken by poor men, and that they have not in twenty years brought into cultivation one-half the land taken by them, and if our irrigation laws required them to cultivate all of their land in a very short time or lose the right to water that they had diverted and taken to the place of intended use, it would result in defeating the very purpose of the public land laws of Congress and defeat most settlers in acquiring

163 Becker v. Marble Creek etc. Co., 15 Utah, 225, 49 Pac. 892.

164 Accord Long on Irrigation, sec. 59.

165 19 Mont. 575, 49 Pac. 400.

166 Compare sec. 96, *ante*, et seq.

167 8 Idaho, 272, 68 Pac. 19.

the right to the use of sufficient water to irrigate their lands."

In Rodgers v. Pitt,[168] Judge Hawley says: "The conditions (draining sloughs and ploughing sage-brush) on the land had to be changed in order to apply the water claimed and appropriated to a useful and beneficial purpose. It was part of the enterprise which Marker had in view in making his appropriation. There is no principle of law that required him under such circumstances to delay making his appropriation until after he succeeded in draining the land and putting it in a condition where it could be cultivated."

Kinney on Irrigation[169] says: "We find that the rule is that he may make an appropriation of all the water that he will need upon his land, and that the fact that he does not make immediate use of the whole land will not destroy his priority of right if he continues the development of his land and makes a full use of his water right within a reasonable time."

In the recent Idaho statute, it is provided that actual application and use of the waters must be made within a time fixed by the State Engineer when he issues the permit of appropriation, and shall not exceed four years.[170] In adjudication of existing priorities by the courts, the time, not exceeding four years, and the amount, for future needs, must be fixed by the decree.[171] Similar provisions fixing the time for future application of the water exist in the statutes passed in 1905, by some of the other States.[172]

We have discussed this point at some length because

168 129 Fed. 932.

169 Sec. 668a. And see Long on Irrigation, sec. 48.

170 Stats. 1903, p. 223, secs. 1, 2, 6, sec. 1 as amended 1905, p. 357.

171 *Ibid.*, sec. 38.

172 See Appendix B.

it is one of unusual importance and because it indicates the changes introduced in fitting the law of appropriation to irrigation. The present policy is to favor those who actually undertake to settle in the hitherto unsettled regions. Correspondingly it somewhat discourages later arrivals; but irrigation actually undertaken is considered worth more than later possibilities.

§ 147. **Summary.**—To sum up the rules concerning the amount of water to which an appropriator is entitled:

The amount is limited to that originally claimed, as stated in the notice of appropriation or application for permit, or determined by the general plan and purpose of the appropriator where the appropriation is by actual diversion without notice, as still permitted in California; if the capacity of the ditch is less than the amount claimed, then limited to the amount actually diverted, which can never exceed the capacity of the ditch; if less than both the above is actually used, then to the amount actually used within a reasonable time, several years being allowed an irrigator for expansion (but in California probably not more than five years), during which time his priority to the unused amount is preserved, and later comers can obtain only such temporary rights therein as will not interfere with his use when ready.

In some States it has been judicially determined or provided by statute what quantity of water is sufficient to irrigate one acre of land.[173]

D. LIMITATIONS ON CHANGE OF PLACE OR PURPOSE.

§ 148. **What Constitutes a Proper Place and Purpose.**—This matter has been previously discussed; the result

[173] *Ante*, sec. 117; there is no such rule in California.

reached being that the water may be used on any land, distant or riparian, owned by the appropriator or not (the chief characteristic of the law of appropriation), and that all purposes are proper if useful and beneficial. The appropriator may have a double point of diversion. He may use a main flume and a branch flume above, as his business requires, sometimes diverting the water by one, and sometimes by the other.[174] The question now to be considered is how far changes from the original place or purpose of use may be made without the necessity of making a new appropriation.

§ 149. **No Injury to Others.**—No change can be made to the disadvantage of existing appropriators or, under the California doctrine, of existing riparian proprietors. They have acquired vested rights in the stream or neighboring land which receive full protection against later acts of the appropriator.[175] Consequently, a change in place of diversion, place of use, or purpose of use, which necessitates, for example, the diversion of an additional quantity of water, is not permitted as against existing claimants on the stream.[176] An appropriator, when the stream becomes clogged up with debris, cannot raise his dam (which is equivalent to moving his point of appropriation up stream) if the water thereby is caused to flood mining claims above.[177] The rule is stated in Hargrave v. Cook[178] as follows:

174 Hobart v. Wicks, 15 Nev. 418.

175 See *ante*, chapter II.

176 Ortman v. Dixon, 13 Cal. 33; McDonald v. Bear River Co., 13 Cal. 220; McKinney v. Smith, 21 Cal. 374; Davis v. Gale, 32 Cal. 26, 91 Am. Dec. 554; Nevada etc. Co. v. Powell, 34 Cal. 109, 91 Am. Dec. 685; Higgins v. Barker, 42 Cal. 233; Santa Paula etc. Works v. Peralta, 113 Cal. 38, 45 Pac. 168; Smith v. Corbit, 116 Cal. 587, 48 Pac. 725; Pomeroy on Riparian Rights, sec. 79.

177 Nevada etc. Co. v. Powell, 34 Cal. 109, 91 Am. Dec. 685.

178 108 Cal. 72, at 80, 41 Pac. 18.

"He may change the point of diversion to another place upon the servient tenement; he is nevertheless limited in so doing to the exigencies of the situation, and has no right to make such change arbitrarily and at will. He may do so when under certain circumstances it is required to enable him to take the amount of water to which he has ownership, but then only when 'others are not injured by the change' (Civ. Code, sec. 1412). His rights are the rights of the grantee of an easement, and extend, in the matter of changing the point of diversion, no further than the boundaries of the servient tenement, and even when entering upon this he is under obligation only to make reasonable changes with reasonable care, and also to repair, so far as possible, whatever damage his labors may have occasioned (Gale and Whately on Easements, 235); as to lands other than those subject to his easement, and as to other claimants and owners, he can make no change at all which injuriously affects them or their rights."

The consent of the party injured will remove the objection.[179]

The burden of showing that the change injures others is upon those opposing the change.[180]

§ 150. **Change of Place of Diversion or Use.**—It was early decided that the place of use may be changed without loss of priority. It was absolutely necessary in the early mining days, when new ground was being continually opened up. In Maeris v. Bicknell, 7 Cal. 261, 68 Am. Dec. 257, it was held that branches could be run to new mining claims without loss of priority, and that the main ditch itself could be extended to new lo-

179 Crescent etc. Co. v. Montgomery, 143 Cal. 248, 76 Pac. 1032.
180 Jacob v. Lorenz, 98 Cal. 332, 33 Pac. 119.

calities. In Kidd v. Laird, 15 Cal. 16, 76 Am. Dec. 472, it was held that the point of diversion or taking the water could likewise be changed. The only limitation recognized by these cases and those following them[181] is that above noted, that others must not be injured in making the change.[182]

In applying the limitation thus generally stated that no rights existing at the time the change is made must be injured, there are numerous cases holding that the rights contemplated by the rule are those of other appropriators on the same natural stream; it does not contemplate the claims (which are bare claims and cannot ripen into a right) of those using the waste discharge from ditches or other artificial watercourses.[183] In the stream itself, later comers have a right to a use and flow—a continuance of the natural flow to the ex-

181 Butte Table Mountain Co. v. Morgan, 19 Cal. 609; Davis v. Gale, 32 Cal. 26, 91 Am. Dec. 554; Junkans v. Bergin, 67 Cal. 267, 7 Pac. 684; Ware v. Walker, 70 Cal. 591, 12 Pac. 475; Ramelli v. Irish, 96 Cal. 214, 31 Pac. 41; McGuire v. Brown, 106 Cal. 660, 39 Pac. 1060, 30 L. R. A. 384; Hargrave v. Cook, 108 Cal. 72, 41 Pac. 18, 30 L. R. A. 390; Charnock v. Higuerra, 111 Cal. 473, 52 Am. St. Rep. 195, 44 Pac. 171, 32 L. R. A. 190; Santa Paula etc. Co. v. Peralta, 113 Cal. 38, 45 Pac. 168; Smith v. Corbit, 116 Cal. 587, 48 Pac. 725; San Luis etc. Co. v. Estrada, 117 Cal. 168, 48 Pac. 1075; Vineland etc. Co. v. Azusa etc. Co., 126 Cal. 486, 58 Pac. 1057, 46 L. R. A. 820; Beyers v. Colonial etc. Co., 134 Cal. 553, 66 Pac. 732; Craig v. Crayton etc. Co., 141 Cal. 178, 74 Pac. 762; Southern Cal. etc. Co. v. Wilshire, 144 Cal. 68, at 72, 77 Pac. 767; Southside etc. Co. v. Burson (Sup. Ct. Cal.), L. A. No. 1383, Aug. 1, 1905; and cases cited *supra*, sec. 149.

182 These rules are now incorporated in Cal. Civ. Code, secs. 1412, 1415; Wyoming Stats. 1905, p. 147; South Dakota Stats. 1905, p. 201, sec. 48; Oklahoma Stats. 1905, p. 274, sec. 10; New Mexico Stats. 1905, p. 270, sec. 6, and the statutes of other States generally: See Appendix B. Accord Strickler v. Colorado Springs, 16 Colo. 61, 25 Am. St. Rep. 245, 26 Pac. 314; Greer v. Heiser, 16 Colo. 306, 26 Pac. 770, and cases cited in 17 Ency. of Law, 485; Kinney on Irrigation, sec. 154 et seq.

183 *Ante*, sec. 132; *infra*, sec. 191.

tent of their appropriation; in the waste from a ditch lower claimants have no right beyond the very particles of water as they come down, with no right to the continuance of the discharge; a change of place of use, causing the discharge to cease, gives them no ground for complaint.[184]

A difficulty arises, however, where the water from a ditch is discharged back again into the natural stream. All the justice seems on the side of considering lower rights as though the discharge were a natural tributary of the stream. To cease the discharge or change its place to the injury of lower claimants on the natural stream should, in justice, be considered as a diversion of a tributary and wrongful. Such was the result in the frequently cited case of Last Chance etc. Co. v. Bunker Hill etc. Co.[185] and in Gassert v. Noyes.[186] A change of place of diversion or use cannot be made to the injury of lower claimants of any kind on the natural stream, though lower claimants to the waste from a ditch alone may be ignored.[187]

§ 151. **Change of Purpose.**—A change of purpose for which the water is used was at the start treated as a distinct question from change of place.[188] It was urged in several cases that the right was limited to the purpose for which first appropriated and that a use for a new purpose could be obtained only by new appropriation. This view obtained some footing in the early de-

184 See sections just cited.

185 (C. C. Idaho), 49 Fed. 430, by Judge Beatty.

186 (Mont.), 44 Pac. 959.

187 For recent statutes on this point in the arid States, see Appendix, and *ante*, chapter VII. The permission of the State Engineer must usually be obtained in the arid States in transferring the use from one place to another.

188 E. g., Maeris v. Bicknell, 7 Cal. 261, 68 Am. Dec. 257.

cisions.[189] But it never took a firm hold. In McDonald v. Bear River Co.[190] it was held that use for a sawmill could be changed to use for a gristmill, and in Davis v. Gale,[191] it was said (*obiter*) that use for placer mining could be changed to use for quartz mining without loss of priority. The more recent cases are in this line, though they do not go into the question closely. They disregard any distinction between change of place of use and change of purpose of use. It seems established that the rule now is that there is no limitation on change of place of use or purpose of use so long as others are not injured by the change.[192] In a recent Nebraska case[193] it was held, relying on the California cases, that a change could be made from use for power purposes to use for irrigation. The change may be a result of a sale of the water right, the purchaser using the water for a new purpose.[194]

The following statement may hence be taken as representing the settled law on the point:

"Suppose a party taps a stream of water for the purpose of surface mining in a given locality, and after-

189 E. g., Ortman v. Dixon, 13 Cal. 33; McKinney v. Smith, 21 Cal. 374; Hill v. Smith, 27 Cal. 476; Nevada etc. Co. v. Kidd, 37 Cal. 282, at 315; and compare Lowden v. Frey, 67 Cal. 474, 8 Pac. 31; Shenandoah etc. Co. v. Morgan, 106 Cal. 409, at 418, 39 Pac. 802, and note in 43 Am. Dec. 28; and Farnham on Waters, sec. 677.

190 13 Cal. 220.

191 32 Cal. 26, 91 Am. Dec. 554.

192 Ramelli v. Irish, 96 Cal. 214, 31 Pac. 41; Jacob v. Lorenz, 98 Cal. 332, 33 Pac. 119; Gallagher v. Montecito etc. Co., 101 Cal. 242, 35 Pac. 770; Hargrave v. Cook, 108 Cal. 72, 41 Pac. 18, 30 L. R. A. 390; though it should be noted that only change of place of use is specifically covered by section 1415, California Civil Code. Accord Pomeroy on Riparian Rights, sec. 65; Kinney on Irrigation, sec. 154; Farnham on Waters, sec. 677; and see cases collected in 60 Am. St. Rep. 813, note.

193 Farmers' etc. Irr. Co. v. Gothenburg Irr. Co. (Neb.), 102 N. W. 487.

194 *Ante*, secs. 42, 121.

ward finds that the ground will not pay or that ground farther on will pay better, may he not abandon the former and extend his ditch to the latter without losing his priority? Or suppose, after working off the surface, he finds quartz, may he not erect a mill and convert the water into a motive power without forfeiting his prior right? Suppose he appropriates the water for the purpose of running a sawmill, and, after the timber is exhausted, he finds that a gristmill will pay—may he not convert the former into the latter without surrendering his priority to some one who may have subsequently and in the meantime, tapped the stream?

"We think all this may be done, and are unable to suggest a plausible reason why it may not. In cases like the present, a party acquires a right to a given quantity of water by appropriation and use, and he loses that right by non-use or abandonment. Appropriation, use, and non-use are the tests of his right; and place of use and character of use are not. When he has made his appropriation, he becomes entitled to the use of the quantity which he has appropriated at any place where he may choose to convey it, and for any useful and beneficial purpose to which he may choose to apply it. Any other rule would lead to endless complications, and most materially impair the value of water rights and privileges."[195]

[195] Davis v. Gale, 32 Cal. 34, 91 Am. Dec. 554.

CHAPTER IX.

PROTECTION OF THE RIGHT.

A. GENERAL PRINCIPLES.

§ 152. Introduction.
§ 153. Materiality of injury is the test.
§ 154. Later land grants all subject to prior appropriations.

B. INJURY TO QUANTITY.

§ 155. General rules.
§ 156. Surplus.
§ 157. Injury from diversion by percolation.
§ 158. Diversion by percolation under the recent decisions.
§ 159. The question of motive.
§ 160. Importance in mining regions.

C. INJURY TO QUALITY.

§ 161. Materiality of injury is the test.
§ 162. Examples.
§ 163. Mining debris.
§ 164. Priority.

D. PROCEDURE.

§ 165. Who can sue.
§ 166. Where suit can be brought.
§ 167. Injunction.
§ 168. Actions at law.
§ 169. Actions to quiet title.
§ 170. Pleading.
§ 171. Use of physical force.
§ 172. Crimes.

A. GENERAL PRINCIPLES.

§ 152. We have been considering up to the present, what the appropriator has a right to do. Now it is proper to consider what he has a right to complain of; that is, what constitutes an infringement of his right by others. The injury may be to quantity or quality of the water.

§ 153. **Materiality of Injury is the Test.**—In respect to the test of wrongful interference, the departure from the common law is great. That system was founded on the equality of right of all riparian proprietors, as expressed in the maxim, "*Aqua currit et debet currere ut currere solebat.*" Each riparian owner had the right to a reasonable use of the stream, though by so doing the use of the stream by another proprietor was made less favorable. But under the law of appropriation it is the reverse. It is founded on the very disregard of the maxim just quoted. The appropriator gets an independent and exclusive right; any material interference with which is wrongful, however reasonable the interference might have been between riparian owners.

The rules of the common law concerning reasonableness have no application,[1] though a few *dicta* will be found to the contrary effect, dating from the time when there was an attempt to minimize the departure of the law of appropriation from the common law.[2] The question under the law of appropriation is whether the flow is still substantially fit for the purpose of the prior appropriator.[3]

"What diminution of quantity or deterioration in quality will constitute an invasion of the rights of the first appropriator will depend upon the special circumstances of each case, considered with reference to the uses to which the water is applied. . . . . In all controversies, therefore, between him and parties subsequently claiming the water, the question for determination is

1 Hill v. King, 8 Cal. 336.

2 *Ante*, sec. 7 (e. g., Phoenix etc. Co. v. Fletcher, 23 Cal. 481).

3 Atchison v. Peterson, 87 U. S. 507, 22 L. ed. 414; Bear River etc. Co. v. New York etc. Co., 8 Cal. 327, 68 Am. Dec. 325; Butte Canal etc. Co. v. Vaughn, 11 Cal. 143, 70 Am. Dec. 769; Phoenix etc. Co. v. Fletcher, 23 Cal. 481; Hill v. Smith, 27 Cal. 476.

necessarily whether his use and enjoyment of the water to the extent of his original appropriation have been impaired by the acts of the defendant. This is substantially the rule laid down in Hill v. Smith, 27 Cal. 483; Yale, Mines, 194."[4]

§ **154. Later Grants of Land are All Subject to Prior Appropriations.**—The passing of public land into private ownership does not free it of water rights or rights to ditches acquired while the land was public. Section 2340, Revised Statutes of the United States, provides:

"All patents granted, or pre-emption or homesteads allowed, shall be subject to any vested and accrued water rights, or rights to ditches and reservoirs used in connection with such water rights, as may have been acquired under or recognized by the preceding section" (viz., section 2339, affirming the doctrine of appropriation). The appropriation will prevail against later riparian rights.[5]

B. INJURY TO QUANTITY.

§ **155. General Rules.**—Later comers must leave undiminished the quantity of flow to which we have already seen the appropriator is entitled; in general, the amount stated in his notice, or permit, or enough to fill his ditch if less than that, or the amount he actually uses, if less than both the former. A diminution of the quantity appropriated need not be the result of actual diversion; for example, if sawdust from a sawmill clogs up one's ditch so as to diminish the flow, it is actionable.[6] Or if the velocity is diminished by a dam preventing the

[4] Per Mr. Justice Stephen Field in Atchison v. Peterson, 87 U. S. 507, 22 L. ed. 414.

[5] *Ante*, secs. 16, 33.

[6] Phoenix Water Co. v. Fletcher, 23 Cal. 481.

working of a mining claim by a prior appropriator, or causing irregularity of flow.[7] Should the interference be the result of increase or acceleration of flow it would also in some cases be actionable, but a discussion of the law of drainage and flooding is foreign to our present purpose.

§ 156. **Surplus.**—The appropriator cannot complain if the surplus over the amount he has appropriated is taken by subsequent appropriators or subsequent riparian owners.[8] We repeat here only that the surplus may consist in the use at certain times (where periodical appropriations), or the surplus in amount, over prior appropriations above or below.[9]

§ 157. **Injury from Diversion by Percolation.**—The rule formerly applied to percolating water was that its movements were too indefinite and precarious to found any right upon distinct in itself; the doctrine resting upon

[7] Phoenix Water Co. v. Fletcher, 23 Cal. 481; Natoma etc. Co. v. McCoy, 23 Cal. 490; Stone v. Bumpers, 46 Cal. 218; Parker v. Gregg, 136 Cal. 413, 69 Pac. 22. See, also, De Baker v. Southern Cal. Ry. Co., 106 Cal. 257, 46 Am. St. Rep. 237, 39 Pac. 610.

[8] Kelly v. Natoma etc. Co., 6 Cal. 105; Brown v. Smith, 10 Cal. 510; Ortman v. Dixon, 13 Cal. 33; McDonald v. Bear River etc. Co., 13 Cal. 220; McKinney v. Smith, 21 Cal. 374; American Co. v. Bradford, 27 Cal. 360; Nevada etc. Co. v. Kidd, 37 Cal. 282, at 313; Higgins v. Barker, 42 Cal. 233; Smith v. O'Hara, 43 Cal. 371; Stein Canal Co. v. Kern Island etc. Co., 53 Cal. 563; Hillman v. Newington, 57 Cal. 56; Brown v. Mullin, 65 Cal. 80, 3 Pac. 99; Junkans v. Bergin, 67 Cal. 267, 7 Pac. 684; Edgar v. Stevenson, 70 Cal. 286, 11 Pac. 704; Ball v. Kehl, 87 Cal. 505, 25 Pac. 679; Barrows v. Fox, 98 Cal. 63, 32 Pac. 811; Santa Paula etc. Works v. Peralta, 113 Cal. 38, 45 Pac. 168; Senior v. Anderson, 115 Cal. 496, 47 Pac. 454; Smith v. Hawkins, 120 Cal. 86, 52 Pac. 139; Senior v. Anderson, 130 Cal. 290, 62 Pac. 563. See *ante*, sec. 29—successive appropriations.

[9] *Ante*, sec. 30. See Natoma etc. Co. v. Hancock, 101 Cal. 42, 31 Pac. 112, 35 Pac. 334; Faulkner v. Rondoni, 104 Cal. 140, 37 Pac. 883. See Farnham on Waters, p. 2085.

the famous English cases of Acton v. Blundell[10] and Chasemore v. Richards.[11] Neither ownership of it aside from the land was recognized, nor any wrongfulness in withdrawing, by percolation, water from a watercourse, which was considered *damnum absque injuria.*[12] We have already seen that California has adopted a new rule opposed to this, and the tendency of other Western States is the same. Underground water of all kinds may in California be appropriated; it is proper here to consider the other part of the rule as concerns appropriation; that is, how far a loss caused by percolation away from appropriated water is a wrongful diversion; a *damnum atque injuria;* a damage the law will now think proper to look into.

§ 158. **Diversion by Percolation Under the Recent Decisions.**—On their face the California decisions appear to establish the rule that a diversion caused by percolation is no different from a diversion of any other kind, and so always wrongful where there is a material injury to a prior right by appropriation of water, whether the damage is to a surface right or an underground one. On their face the decisions seem to establish the rule that the appropriator of water in surface streams, springs, wells, etc., of which he is thus deprived, may always maintain an action for the diversion. The leading case of Katz v. Walkinshaw[13] held that a diversion by percolation of water from a well was wrongful. Though the right to the well was not one of appropriation in that case, yet the court declared that the principle was the same, however the right to the well was

10 12 Mees. & W. 324.

11 7 H. L. Cas. 349.

12 Chasemore v. Richards, *supra.*

13 141 Cal. 116, 99 Am. St. Rep. 35, 70 Pac. 663, 74 Pac. 766; and cf. Sullivan v. Northern Spg. Min. Co., 11 Utah, 438.

acquired. A diversion of the percolating water appropriated as feeding a spring—that is of the percolations supplying the spring—has been held unlawful.[14] A tunnel diverting the percolations which supply the source of an appropriated stream, before they reach the stream, has been held unlawful;[15] and to withdraw, by a seepage tunnel, the sub-flow of an appropriated stream, being equivalent to a seepage from the stream itself, is all the more unlawful.[16]

Another important case may be suggested; that is, the withdrawal of water by percolation may dry up the neighboring soil itself. In the Nineteenth Annual Report of the United States Geological Survey,[17] in an elaborate investigation of the movements of ground water, it is said: "In another part of this paper it was shown, from direct observations that the withdrawal of a comparatively small amount of water from a soil already saturated is sufficient to produce a marked change in the level of the ground water, and hence to cause marked change in the level of waters in wells, and in the height of the ground water in sections where crops depend on water which is derived from the under-flow by natural sub-irrigation." If an action can be maintained against one for draining a well by percolation, it is only a small step to holding him liable for draining the soil of the water needed for crops in "natural sub-irrigation." We have already noticed the doubt whether the doctrine of Katz v. Walkinshaw will not

14 In Cohen v. La Canada etc. Water Co., 142 Cal. 437, 76 Pac. 47.

15 In McClintock v. Hudson, 141 Cal. 275, 74 Pac. 849; compare Strait v. Brown, 16 Nev. 317, 40 Am. Rep. 497.

16 *Ibid;* Los Angeles v. Pomeroy, 124 Cal. 597, 57 Pac. 585; Vineland v. Azusa etc. Co., 126 Cal. 486, 58 Pac. 1057, 46 L. R. A. 820; Montecito etc. Co. v. Santa Barbara, 144 Cal. 578, 77 Pac. 1113.

17 Part II, page 274.

be limited to streams, springs, and to such ground water only as exists in a *quasi* subterranean reservoir, in which case the diversion of the under-flow needed in natural sub-irrigation might still be treated as *damnum absque injuria;* but, as before noticed, the later cases tend against limiting the doctrine to cases where such subterranean reservoirs exist.[18]

When the right is based on appropriation simply (as distinguished from the correlative rights of landowners) the water may be used on distant lands.[19]

§ **159. The Question of Motive.**—Mr. Justice Temple's opinion in Katz v. Walkinshaw[20] turns on the motive actuating the person who diverts the water by percolation, and would give no action against him where done "in the ordinary use of one's land." The learned judge says:[21] "In Acton v. Blundell, 12 Mees. & W. 324, as has been said, the working of a mine upon an adjoining estate drained certain springs of plaintiff's land. It would have been sufficient to defeat plaintiff's action to have said that the working of a coal mine in a proper way is a reasonable use of land, and that it was without malice or intent to injure plaintiff." "The proprietor may make a reasonable use of his own land, although in so doing he obstructs or changes the percolation of water to or from his neighbor's land."[22] "The peculiar nature of the property which enables one to take it by drainage does not justify the taking save in the usual and reasonable use of his own land—in other words, for the proper use and betterment of his own prop-

18 *Ante*, sec. 79.

19 Katz v. Walkinshaw, *supra (dictum)*.

20 141 Cal. 116, 99 Am. St. Rep. 35, 70 Pac. 663, 74 Pac. 766.

21 At page 142.

22 At page 146.

erty."[23] Such also, was the rule of the Civil Law, as quoted in the opinion (virtually dissenting) of Baron Parke in Chasemore v. Richards.[24]

If this view prevails, the diversion of appropriated water through the agency of percolation would not be actionable if done solely from the proper motive of making the ordinary use of one's own land in mining, grading, etc. Whether actionable would turn upon the motive with which done, being *prima facie* wrongful, but a proper motive being good matter in excuse.[25]

On the other hand there is the oft-repeated statement that motive has no place in the common law, and that the motive with which an act is done is immaterial.[26] Moreover, in the case of Hanson v. McCue,[27] the leading California case on the subject of percolating water following the English rule, there were several *dicta* that the motive would be looked into, but the court in its final opinion in Katz v. Walkinshaw, refused to accept this ground of distinction.[28] Further, the actual de-

23 At page 147.

24 7 H. L. Cas. 349.

25 The case of Katz v. Walkinshaw is cited to this effect in an article (by James Barr Ames) in 18 Harvard Law Review, 415. The matter has recently come before the courts of other States, and a similar view appears to be there taken. (99 Am. St. Rep. 66, note; 64 L. R. A. 255, note; 18 Harvard Law Review, 415, *supra*.) This must be distinguished from the rule that the diversion is *prima facie* rightful, and that malice makes it unlawful—a view that prevails in some States (see 19 L. R. A. 92, note) and is much less a departure from the old rule. A review of the cases on underground water has been published by the United States Geological Survey, Water Supply Paper, 122.

26 Allen v. Flood, [1898] App. Cas. 1; Chasemore v. Richards, 7 H. L. Cas. 349; Fisher v. Feigh, 137 Cal. 39, 92 Am. St. Rep. 77, 69 Pac. 618, 59 L. R. A. 333.

27 42 Cal. 303, 10 Am. Rep. 299.

28 The following passages from Hanson v. McCue, 42 Cal. 303, 10 Am. Rep. 299, are hence worth quoting. They show that the court there really favored the motive rule, and as the case was repudiated

cisions since Katz v. Walkinshaw have not discussed the question of motive in this connection, and on their face

in Katz v. Walkinshaw, that rule would seem to have been repudiated also:

"The question then came to this: One who is owner of the freehold—*usque ad infernos*—digging in the soil for the lawful purpose of his own profit, and not actuated by the malicious intent to wantonly deprive the plaintiff of the flow of water, is, at the instance of the latter, enjoined from so digging, because he will thereby divert the waters which percolate the soil from the spring from which the artificial watercourse, leads to the lands of the plaintiff." (Page 309.)

"The defendant would have had the right to dig upon his own land for any purpose not proceeding from mere malice, even though he had thereby diverted the percolations from a spring on the plaintiff's premises. If the plaintiff was the owner of the Dixon Spring, with a consequent right to the use of all its water, the defendant would have the clear right to dig upon his adjoining land, for any useful purpose, notwithstanding he might thereby divert the percolations, and thus destroy the spring. He would not be allowed to do it from mere wantonness and malice; but the owner of the soil is entitled to use the percolations through it, for any purpose which he may deem beneficial, or may divert them in another direction, in the prosecution of any work on his own land which he may consider advantageous to him. I deem it unnecessary to inquire into the reason of the ruling, which, however, is fully stated in the carefully considered case already cited, and the numerous authorities, therein referred to. I do not understand plaintiff's counsel to deny that the defendant might lawfully divert the percolations from the spring, provided it was only incidentally done in the prosecution of an independent or collateral work on his own premises; but he claims that the sole object of the tunnnel is to cut off the supply of the water, and thus destroy the spring, which he insists the defendant has no right to do by a work expressly prosecuted for that especial purpose. But the findings show that the object of the tunnel is to collect the water for a commercial purpose, to wit: to furnish the neighboring village of San Rafael a supply of fresh water—and this certainly is a proper and useful purpose. If the defendant has the right to divert the percolations by digging a ditch for the mere purpose of drainage, or by sinking a well essential to the enjoyment of his property, I can perceive no reason why he may not accomplish the same result for any other purpose which he may deem advantageous to him; I think he may do it for any purpose which is not purely malicious." (Page 311.)

appear to consider the diversion by percolation as no different from a direct diversion of a stream by a ditch, and always actionable, whatever the motive, if the right of another as appropriator or his correlative right as landowner, is damaged. Finally, in Katz v. Walkinshaw, in the final opinion (given by Mr. Justice Shaw), discussing[29] the case of Cross v. Kitts,[30] the court considers that case as deciding that a miner cannot cut off the percolations which feed a stream, though done in the legitimate work of mining his own land, and approves Cross v. Kitts on that ground. That the motive with which the water is diverted by percolation will not be looked into has, then, strong support under the recent cases.

In Copper etc. Co. v. Wabash etc. Co.[31] it was held that mining in the ordinary way is no defense where the mine shaft withdrew, by percolation, the sub-flow of a stream.

If the recent cases do not establish the rule that motive will not be looked into, they at least establish the following: If motive is looked into, the diversion of water for one's own use and application, as distinguished from the necessity of drainage, is not a proper motive if thereby the right vested in another as appropriator is damaged.[32]

29 At page 129.

30 69 Cal. 217, 58 Am. Rep. 558, 10 Pac. 409.

31 C. C. U. S., S. Dist. Cal., 114 Fed. 991.

32 An interesting feature of these development works is the constant strife existing in Southern California between the various tunnel and well owners. For instance, the owner of a certain piece of property discovered by a tunnel the presence of a considerable body of water on his land; his neighbor to the south, whose land is at a lower elevation, drained the first tunnel by digging another on a lower grade and extending it to his northern property line. This has been done repeatedly, in some cases the water having been so diverted by two or three owners in succession.

§ 160. **Importance in Mining Regions.**—This is of great importance to miners, because their works are likely to drain wells and springs and even streams in the neighborhood. As an eminent authority says: "In sinking a shaft through permeable ground it is, of course, necessary to lift continuously the ground water. The water level thus acquires an inclination towards the shaft, which may thus receive not only the flow of the immediate vicinity, but even also that of neighboring river systems."[33]

If the rule that the motive actuating one who diverts water by percolation will not be looked into prevails, then the principle of Katz v. Walkinshaw[34] would make the miner an insurer to agriculturists against damage to crops, etc., from dessication (excepting only the results in extraordinarily dry seasons—that is, from a *"vis major"* or "act of God").[35]

33 Posepny on Ore Deposits (American Institute Mining Engineers), page 19.

The following is an example of what is sometimes necessary in mining, and applies to other mining as well as coal mining:

"The importance of the water problem in connection with anthracite mining is well shown by the fact that there are a number of pumping stations having capacities of from 5,000,000 to 10,000,000 gallons per day. The Gilberton water-shaft of the Philadelphia & Reading Co. is about 1,000 feet deep and is equipped with hoisting buckets. The capacity of the plant is 7,000,000 gallons per day, and it is designed to drain the entire basin operated from the Draper and Gilbertson collieries": Transactions of the American Institute of Mining Engineers, vol. 34, p. 523.

34 141 Cal. 116, 99 Am. St. Rep. 35, 70 Pac. 663, 74 Pac. 766.

35 This result is noticed in Acton v. Blundell, 12 Mees. & W. 324, which considered it a strong reason for holding just the opposite of Katz v. Walkinshaw. The court, in Acton v. Blundell, said:

"In the case of the running stream, the owner of the soil merely transmits the water over its surface; he receives as much from his higher neighbor as he sends down to his neighbor below; he is neither better nor worse; the level of the water remains the same. But if the man who sinks the well in his own land can acquire by that act

When one further decision is considered, it appears that the law of waters would be taking a form that leaves the miner at a decided disadvantage in controversy with his agricultural neighbors. Not only would the miner be liable if the water is taken from wells, etc., but, on the other hand, he must suffer the percolation of waste water from irrigation into his mines, and has no right of action even if the water comes through in such quantities as to prevent the working of the mine. It was so held in Gibson v. Puchta, 33 Cal. 310. The result would be that the miner must not take water from the farmer's land, but the farmer is not reciprocally bound to keep the water out of the miner's works. It would join with the debris cases in showing sharply that mining has ceased to be the paramount industry in California, and that agriculture has taken its place.

The relation of the new rule to mining is one of the many phases of the new doctrine of percolating water

an absolute and indefeasible right to the water that collects in it, he has the power of preventing his neighbor from making any use of the spring in his own soil which shall interfere with the enjoyment of the well. He has the power, still further, of debarring the owner of the land in which the spring is first found, or through which it is transmitted from draining his land for the proper cultivation of the soil; and thus, by an act which is voluntary on his part, and which may be entirely unsuspected by his neighbor, he may impose on such neighbor the necessity of bearing a heavy expense, if the latter has erected machinery for the purposes of mining, and discovers when too late, that the appropriation of the water has already been made. Further, the advantage on one side, and the detriment to the other, may bear no proportion. The well may be sunk to supply a cottage, or a drinking-place for cattle; whilst the owner of the adjoining land may be prevented from winning metals and minerals of inestimable value. And, lastly, there is no limit of space within which the claim of right to an underground spring can be confined; in the present case, the nearest coal-pit is at the distance of half a mile from the well: it is obvious the law must equally apply if there is an interval of many miles." See, also, Wheatley v. Baugh, 25 Pa. St. 532, 64 Am. Dec. 721.

that the case of Katz v. Walkinshaw has thrown open, and that await decision. The wide statement that the motive with which an act is done is immaterial need not be sustained. It is giving way in other branches of the law, especially where injunctions are granted against malicious combinations in strikes and boycotts.[36] It is inconsistent with Mr. Justice Temple's opinion in Katz v. Walkinshaw; and it is inconsistent even with the irrigation case cited above, where the decision went on the ground that the defendant's motive arose out of the undoubted right to cultivate and irrigate his land. If the motive is looked into on one side, it should also be looked into on the other. If the motive to make profit by cultivating and planting in the ordinary way justifies the farmer in irrigating, the motive to profit by mining in the ordinary way should justify the drainage of percolating water naturally incident to that. Any damage which occurs would then lie where the nature of the land as mineral or agricultural makes it fall.

The difficulty if the miner is held liable will be great in showing that the acts of the miner in fact do draw off the water, since there are no signs above ground, or in plain sight, such as there are when a surface stream is tapped by a ditch.[37] The court must make a specific finding as to the amount of diminution caused.[38] When it comes to showing specifically an underground connection causing the loss of percolating water from a well, it is likely that we shall have the same elaborate and indefinite discussions that have surrounded the min-

36 See 18 Harvard Law Review, 411, 423, 444.

37 See Katz v. Walkinshaw, 141 Cal. 116, at 137, 99 Am. St. Rep. 35, 70 Pac. 663, 74 Pac. 766, and Montecito etc. Co. v. Santa Barbara, 144 Cal. 576, 77 Pac. 1113.

38 McClintock v. Hudson, 141 Cal. 275, 74 Pac. 849; Cohen v. La Canada etc. Co., 142 Cal. 437, 76 Pac. 47.

ing suits to protect extralateral rights to a vein; to show an underground connection between the ore in one's shaft, and the distant works of a trespasser, has always been a difficult undertaking. It must be remembered, however, that the court has frequently said that the intrinsic difficulty of questions does not prevent the court from undertaking to solve them.[39]

It must be borne in mind that the discussion we have given of this whole matter has been closely confined to the law of appropriation, and has avoided questions of correlative rights of landowners.[40]

C. INJURY TO QUALITY.

§ 161. **Materiality of Injury is the Test.**—The appropriator having an independent and exclusive right, any material interference therewith is wrongful, however reasonable it might have been between riparian owners. The rules of the common law concerning reasonableness have no application. The question is whether the water is still substantially fit for the special purpose of the prior appropriator.[41] The burden of showing the materiality of the injury is upon the plaintiff, as is the ultimate burden of proof in any suit, and consequently, for example, a placer miner can have no action where later comers above muddy the stream, but still leave it fit for his purpose.[42] In Hill v. Smith, 27

39 E. g., Butte etc. Co. v. Vaughn, 11 Cal. 143, 70 Am. Dec. 769, and Bear River etc. Co. v. New York etc. Co., 8 Cal. 327, 68 Am. Dec. 325.

40 See *infra*, sec. 214.

41 *Supra*, sec. 153.

42 Atchison v. Peterson, 87 U. S. 507, 22 L. ed. 414; Bear River Co. v. New York Co., 8 Cal. 327, 68 Am. Dec. 325; Butte etc. Co. v. Vaughn, 11 Cal. 143, 70 Am. Dec. 769; Phoenix etc. Co. v. Fletcher, 23 Cal. 481; Hill v. Smith, 27 Cal. 476; Montana etc. Co. v. Gehring, 75 Fed. 384, 21 C. C. A. 414.

Cal. 476, at 484, the court lays down the rule as follows:

"It may be that a slight diminution or deterioration will impair his use of the water, and it may be that such use would not be impaired by a very considerable reduction in quantity or quality. The question must be determined in view of the use to which the water is applied and the other circumstances developed by the testimony."

§ 162. **Examples.**—The following are some examples of what has been held an unlawful deterioration of the quality of the water against prior appropriators: If a later miner so muddies a stream that it cuts the hose of prior hydraulic miners below;[43] if one miner's tailings clog a prior miner's tail-race,[44] or fill a prior appropriator's ditch;[45] if sawdust is thrown into a stream.[46] Rendering the water dangerous to health is a crime.[47]

§ 163. **Mining Debris.**—In Pennsylvania[48] an exception is made in favor of miners to the use of streams to carry off waste, as against agriculturists upon the stream below. In California an early attempt was made to establish that principle, and in Sims v. Smith[49]

43 Hill v. Smith, 27 Cal. 476.

44 Gregory v. Harris, 43 Cal. 39.

45 Logan v. Driscoll, 19 Cal. 623, 81 Am. Dec. 90; Junkens v. Bergin, 67 Cal. 267, 7 Pac. 684.

46 Phoenix etc. Co. v. Fletcher, 23 Cal. 481,

47 *Infra*, sec. 172. See, also, Natoma etc. Co. v. McCoy, 23 Cal. 490; Hill v. Smith, 32 Cal. 166.

48 Sanderson v. Pennsylvania Coal Co., 86 Pa. St. 401, 27 Am. Rep. 711, 102 Pa. St. 370; Pennsylvania Coal Co. v. Sanderson, 94 Pa. St. 302, 39 Am. Rep. 785, 113 Pa. St. 126, 57 Am. Rep. 445, 6 Atl. 453.

49 7 Cal. 148, 68 Am. Dec. 233.

and Bear River etc. Co. v. New York etc. Co.[50] it was held that a channel is a natural outlet for the discharge of tailings by all miners, without liability therefor. But it was soon settled that the law does not recognize any such right to a channel merely as a way of necessity,[51] and that no partiality is given to miners.[52] Consequently injunctions were granted against mining in the following cases because it materially[53] injured prior appropriators (or occupants) who were engaged in agriculture: Sluice mining;[54] hydraulic mining.[55] In Robinson v. Black Diamond Coal Co.,[56] debris from

50 8 Cal. 327, 68 Am. Dec. 325.

51 Esmond v. Chew, 15 Cal. 137; Wixon v. Bear River etc. Co., 24 Cal. 367, 85 Am. Dec. 69; Levaroni v. Miller, 34 Cal. 231, 91 Am. Dec. 692; Stone v. Bumpus, 40 Cal. 428; Gregory v. Harris, 43 Cal. 38.

52 *Ante*, secs. 9, 32.

53 Material injury must be shown as above set forth. In this connection says Lindley on Mines, section 841:

"While the privilege of depositing such tailings in the streams must be reasonably exercised, and so as not to materially impair or destroy rights acquired by a lawful prior appropriator, yet to say that the discharge of such tailings is a nuisance *per se*, or to restrict it within unreasonable limits, is to interdict the prosecution of a lawful enterprise and practically to confiscate property of inconceivable value. Should any such stringent rule be invoked in regard to either quartz or hydraulic mining, the industry would be abandoned, awaiting the advent of the magician who will separate gold and silver from the earth and rocks without the aid of water."

54 Levaroni v. Miller, 34 Cal. 231, 91 Am. Dec. 691; County of Sierra v. Butler, 136 Cal. 547, 69 Pac. 418; County of Yuba v. Kate Hayes etc. Co., 141 Cal. 360, 74 Pac. 1049; McCarthy v. Gaston etc. Min. Co., 144 Cal. 542, 78 Pac. 7.

55 Logan v. Driscoll, 19 Cal. 623, 81 Am. Dec. 90; People v. Gold Run etc. Co., 66 Cal. 138, 56 Am. Rep. 80, 4 Pac. 1152; Hobbs v. Amador etc. Co., 66 Cal. 161, 4 Pac. 1147; County of Yuba v. Cloke, 79 Cal. 239, 21 Pac. 740; Miller v. Highland Ditch Co., 87 Cal. 430, 22 Am. St. Rep. 254, 25 Pac. 550; Woodruff v. North Bloomfield Co., 18 Fed. 753, 9 Saw. 441; United States v. North Bloomfield Co., 81 Fed. 243; North Bloomfield v. United States, 88 Fed. 664, 32 C. C. A. 84.

56 57 Cal. 412, 40 Am. Rep. 118.

coal mining was carried far down stream and there, when the stream overflowed, covered agricultural ground. The court there said that the long distance made no more difference than if the debris had been dumped on the fields after being carried there by carts or cars.

As a result of these cases on hydraulic mining, Congress prohibited it in California, making it a misdemeanor, unless under permission from the "Debris Commission."[57] This prohibition is made to extend to whatever the words "hydraulic mining" or "mining by the hydraulic process" meant in 1893 when the act was passed. Whether it would prohibit such things as working over tailings or dumps or other artificial banks of earth by water under pressure, is not clear.[58]

§ 164. **Priority.**—We have been considering the question from the view of injury to the prior appropriator. The principles on which the law of appropriation rest should apply with equal force where the case is reversed, and the injury is to the subsequent claimant. If the prior claimant appropriated the stream for the purpose of depositing tailings, sawdust, or other material in it, and so used the water at the time the subsequent claimant arrived, the continuance of the pollution of the stream should be lawful, as one of the characteristics in which the law of appropriation is a departure from the common law of riparian rights. It

57 27 Stats. at Large, 507.

58 If emphasis is laid on the words "hydraulic process," as in Lindley on Mines, section 848 et seq., such work would clearly be within the act. If emphasis is laid on the word "mining," it might, perhaps, not. The effect of the act, and the question of pollution as applied to mining are discussed at length in Lindley on Mines, 2d ed., sec. 852 et seq.; Pomeroy on Riparian Rights, sec. 76.

was so held in Sims v. Smith.[59] It is similar in principle to O'Keiffe v. Cunningham,[60] where it is said that tailings can be deposited on land by a prior appropriation (*i. e.*, location) of the land for that purpose, and Jacob v. Day,[61] where it was held that tailings can be "rushed" across land in a ditch, if the ditch was on the land while public, prior in time to the title of the occupant of the land. There is no distinction in principle between the right acquired by priority to deposit tailings on land, rush them in a ditch, or deposit them in streams. They are equally rights to which exclusive use may be acquired by priority on public lands.

How far priority will sanction the pollution is, however, left somewhat in doubt by the "Debris Cases," holding that hydraulic mining was a public nuisance in those cases, and that the right to continue a public nuisance could not be maintained under a claim of either priority or prescription.[62] Following this, pollution has been declared to be a public nuisance.[63] In People v. Elk River etc. Co., cited in the preceding note, pollution of a stream was said to be a public nuisance if it interferes with use by a considerable number of persons on the banks of a stream though non-navigable.

In Suffolk etc. Co. v. San Miguel etc. Co.[64] tailings from a stamp-mill were enjoined at the suit of a power company, though to some extent at least the stamp-

59 7 Cal. 148, 68 Am. Dec. 233.

60 9 Cal. 589.

61 111 Cal. 571, 44 Pac. 243.

62 See cases cited above and People v. Gold Run etc. Co., 66 Cal. 138, 56 Am. Rep. 80, 4 Pac. 1152; and Woodruff v. North Bloomfield Co., 18 Fed. 801, 9 Saw. 441, especially.

63 In Conrad v. Arrowhead etc. Hotel Co., 103 Cal. 399, 37 Pac. 386; People v. Elk River etc. Co., 107 Cal. 214, 48 Am. St. Rep. 121, 40 Pac. 486 (a dairy); People v. Elk River etc. Co., 107 Cal. 221, 48 Am. St. Rep. 125, 40 Pac. 531 (a sawmill).

64 9 Colo. App. 407, 48 Pac. 828.

mill had discharged tailings into the stream before the power company began. (The number of stamps thereafter, however, had been increased.)

In Conrad v. Arrowhead etc. Hotel Co.[65] where the pollution consisted in refuse from a hotel, the court states the rule as follows:

"Locators and appropriators of the waters of a stream have no rights antecedent to the date of their location. If others have, prior to their location, decreased the quantity of the water flowing in such streams, or caused a deterioration of its quality, the subsequent locator cannot complain.

"Familiar examples of the application of this rule as between appropriators are of frequent occurrence in the mining regions of this State, where water is diverted from flowing streams, upon which mining has destroyed the purity of the water. In such cases the appropriator takes the water with his eyes open—takes it as he finds it, and as to him the like continued deterioration is *damnum absque injuria*."[66]

D. PROCEDURE.

§ 165. **Who can Sue.**—The owner of the water right has the usual recourse to the courts, as he has in the protection of any other property.[67] A tenant having the right

65 103 Cal. 399, 37 Pac. 386.

66 Concerning the pollution of underground waters, reference may be made to the following cases: Kinnaird v. Standard Oil Co., 89 Ky. 468, 25 Am. St. Rep. 545, 12 S. W. 937, 7 L. R. A. 451; Ballard v. Tomlinson, 29 Ch. D. 115, 122, 126; Sherman v. Fall River etc. Co., 5 Allen (Mass), 213; Alston v. Grant, 3 El. & B. 128; Turner v. Mirfield, 34 Beav. 390; Womersley v. Church, 17 L. T., N. S., 190; Clark v. Lawrence, 6 Jones Eq. 83, 78 Am. Dec. 241; Greencastle v. Hazelett, 23 Ind. 186; Wahle v. Reinbach, 76 Ill. 322, 326; Upjohn v. Richland Township, 46 Mich. 549, 41 Am. St. Rep. 178, 9 N. W. 845; Brown v. Illius, 27 Conn. 84, 71 Am. Dec. 49; Dillon v. Acme Oil Co., 49 Hun (N. Y.), 565, 2 N. Y. Supp. 289; Barnard v. Shirley, 135 Ind. 547, 41 Am. St. Rep. 454, 34 N. E. 600, 35 N. E. 117, 24 L. R. A. 568.

67 See Long on Irrigation, sec. 110.

of possession may sue a stranger, the injunction obtained becoming inoperative at the end of the lease.[68] The landlord can sue a stranger for diversion, though tenant is in possession.[69] One tenant in common can sue his co-tenant for diversion, and in California, is entitled to treble damages.[70] One tenant in common may alone sue a stranger for diversion.[71]

On partition suit between tenants in common, there can only be a sale.[72]

The question whether the appropriation of water interferes with the rights of other appropriators cannot be raised by parties who are strangers to such other appropriators not parties to the action.[72a]

§ 166. **Where Suit can be Brought.**—A diversion operates upon the whole of a ditch and is an injury to every part of it. Consequently an action can be brought in Tulare County for a diversion at the head of the ditch in Fresno County, the ditch lying in both counties.[73] Likewise of a ditch in two States; a diversion in Montana is actionable in Wyoming into which State the ditch runs.[74]

68 Heilbron v. Fowler etc. Canal Co., 75 Cal. 426, 7 Am. St. Rep. 183, 17 Pac. 535.

69 Heilbron v. Last Chance Water etc. Co., 75 Cal. 117, 17 Pac. 65.

70 Cal. Stats. 1889, p. 202. Compare Civ. Code, secs. 842, 843. See Pomeroy on Riparian Rights, sec. 59, and Farnham on Waters, sec. 504.

71 Rodgers v. Pitt, 129 Fed. 932.

72 *Ante*, sec. 49; *infra*, sec. 169.

72a Gutierres v. Albuquerque etc. Co., 188 U. S. 545; Senior v. Anderson, 138 Cal. 716, 72 Pac. 349; Utt v. Frey, 106 Cal. 396, 39 Pac. 807.

73 Lower Kings River etc. Co. v. Kings River etc. Co., 60 Cal. 408.

74 *Ante*, sec. 67; Willey v. Decker, 11 Wyo. 496, 100 Am. St. Rep. 939, 73 Pac. 210; citing and relying on Lower Kings River etc. Co. v. Kings etc. Co.

A suit to determine priority between appropriators does not involve a Federal question merely because it is concerned with section 2339 of the Revised Statutes of the United States.[75]

A State engaging directly in diverting water or licensing those who are, may be sued by a lower State acting as "*parens patriae*," and the Supreme Court of the United States will have original jurisdiction.[76]

§ 167. **Injunction.**—The most efficient remedy is, of course, the writ of injunction, whereby interference is stopped forthwith. The chief requisites to support a case for an injunction are as follows:

The damage involved must be irreparable. An injury to a ditch which will not destroy its efficiency and can be easily repaired, will not support a case for an injunction—the owner will be left to his less drastic remedies.[77] To be irreparable it is not necessary that the damage should be measurable in money to a large sum.[78] It is equally irreparable if a continuance of it would ripen into a right by prescription, resulting in a total loss to the owner, though the act itself causes slight or no money damage at all.[79] The injunction in such case

75 Telluride etc. Co. v. Rio Grande etc. Co., 175 U. S. 639, 20 Sup. Ct. Rep. 245, 44 L. ed. 305.

76 Kansas v. Colorado, 185 U. S. 125, 22 Sup. Ct. Rep. 552, 46 L. ed. 838.

77 Clark v. Willett, 35 Cal. 534; Lorenz v. Waldron, 96 Cal. 243, 31 Pac. 54.

78 Heilbron v. Fowler etc. Canal Co., 75 Cal. 426, 7 Am. St. Rep. 183, 17 Pac. 535; Spargur v. Heard, 90 Cal. 221, 27 Pac. 198.

79 Creighton v. Evans, 53 Cal. 55; Moore v. Clear Lake etc. Co., 68 Cal. 146, 8 Pac. 816; Standford v. Felt, 71 Cal. 249, 16 Pac. 900; Conkling v. Pacific etc. Co. 87 Cal. 296, 25 Pac. 399; Walker v. Emerson, 89 Cal. 456, 26 Pac. 968; Mott v Ewing, 90 Cal. 231, 27 Pac. 194; Barnes v. Sabron, 10 Nev. 217; Vestal v. Young, 148 Cal. ——, 30 Cal. Dec., 313, 317.

is granted for the vindication and preservation of plaintiff's right.[80]

The damage must be prospective. The interference must be likely to continue in the future, or there must be a threat of continuance.[81] An injury to a ditch already accomplished in the past will not support a case for an injunction.[82]

There must be no laches or delay.[83] There is no necessity of first making out the legal right at law.[84]

There must be no disparity of inconvenience. Because of the rule known of the "balance of convenience," an injunction may be refused;[85] that is, because the loss to the appropriator (plaintiff) would be small, as compared to the loss to the defendant if his works were enjoined. Thus no injunction will be granted if the defendant will restore to the stream the amount he has been taking from it.[86] "When the title to the property is in dispute between the parties, the extent of inconvenience and expense to which the defendant would be subjected by the granting of the injunction, as compared with the injury the plaintiff would be likely to suffer if refused, often forms an important consideration in determining the right to an injunction."[87]

80 Brown v. Ashley, 16 Nev 312.

81 Tenney v. Miners' etc. Co., 7 Cal. 340.

82 Tuolumne etc. Co. v. Chapman, 8 Cal. 392; Clark v. Willett, 35 Cal. 534; Lorenz v. Waldron, 96 Cal. 243, 31 Pac. 54.

83 Lux v. Haggin, 69 Cal. 255, at 265, 10 Pac. 674.

84 *Ibid;* and Tuolumne etc. Co. v. Chapman, 8 Cal. 392.

85 Slade v. Sullivan, 17 Cal. 102; Clark v. Willett, 35 Cal. 534; Heilbron v. Fowler etc. Canal Co., 75 Cal. 426, 7 Am. St. Rep. 183, 17 Pac. 535; Modoc etc. Co. v. Booth, 102 Cal. 151, 36 Pac. 431.

86 Montecito etc. Co. v. Santa Barbara, 144 Cal. 578, 77 Pac. 1113.

87 Real Del Monte M. Co. v. Pond M. Co., 23 Cal. 82. Citing Hicks v. Compton, 18 Cal. 210; 3 Daniell's Chancery Practice, 1860; Adams' Equity, 357; Bruce v. Delaware & Hudson Canal Co., 119 Barb. S. C. 371.

Such a disproportion of inconvenience as to cause refusal of an injunction does not depend entirely on the difference as measured in money. Plaintiff's right is not measured in money damage. The difference must go to the balance, not of damages, but of the value of the substantive right. It is not enough for defendant to say that, admitting plaintiff's right to be a substantial one, defendant in invading it does so because he cannot otherwise work his mine, and will take all precaution to keep the money damage small. That is no defense to an injunction as the court held in one case,[88] saying:

"But even had the defendants, after having admitted the property rights of plaintiffs in their ditch, as alleged in their complaint, admitted their intention to wash away the ground upon which it was constructed, as alleged by plaintiffs, and alleged in justification of such purpose their design to substitute in place of so much of plaintiff's ditch as they should wash away, a flume or metal pipe for conducting the water for the use of plaintiffs, and that such flume or pipe would answer plaintiffs' purposes as well as the ditch, with a prayer that the court, by its judgment, and decree, authorize them to consummate their designs, upon their filing a bond payable to plaintiffs, conditioned to keep such flume or metal pipe in repair until plaintiffs' claims should be worked out, I know of no principle of law or power in a court of equity to justify or authorize such an invasion of the property rights of one private party to serve the wishes, convenience, or necessities of another private party. Such a principle, if once adopted by judicial tribunals upon ground of necessity in view of the peculiar relations and character of private property rights of miners on the public domain, would readily be invoked as applicable to other property

88 Gregory v. Nelson, 41 Cal. 278, at p. 289.

rights, and its practical application would result in a system of judicial condemnation of the property of one citizen to answer an assumed paramount necessity or convenience of another citizen.

"It is the duty of courts to protect a party in the enjoyment of his private property, not to license a trespass upon such property or to compel the owner to exchange the same for other property to answer private purposes or necessities."[89]

The refusal of an injunction because of the rule concerning the balance of convenience is illustrated in the following case. A mining company was depositing tailings upon land below its mill. For the purpose of speculation, plaintiff bought up this land, and asked an injunction. That was refused on the ground that it would mean ruin to the mining company, and plaintiff had bought the land merely with a view to litigation.[90] It was held in another case that where, in an action to recover damages and to enjoin defendant from maintaining a ditch upon plaintiff's land, it appears that the land was of little value; that the injury to the land was not real; that the damages were merely nominal; that defendant was not insolvent; and that plaintiff's remedy at law was adequate, then the court did not err in refusing to grant an injunction.[91]

The rule as to the balance of convenience, or comparative hardship, is more favored in refusing a preliminary injunction than a permanent one.[92]

89 See Pomeroy on Riparian Rights, sec. 67; Weiss v. Oregon etc. Co., 13 Or. 496, 11 Pac. 255; High on Injunction, sec. 795; Woodruff v. North Bloomfield etc. Co., 18 Fed. 753, 9 Saw. 441.

90 Edwards v. Allouez Co., 38 Mich. 46, 31 Am. Rep. 301.

91 Hoye v. Sweetman, 19 Nev. 376, 12 Pac. 504.

92 California etc. Co. v. Enterprise etc. Co. (C. C. Southern Dist. Cal.), 127 Fed. 741.

A mandatory injunction, ordering the removal of an obstruction from the stream, may be granted.[93]

A mandatory injunction to compel the removal of dams which have wrongfully diverted water onto plaintiff's property, the effect of which will be to destroy trees and cut gulches, is held[94] to be properly awarded, although plaintiff has not established his right to damages by a verdict of jury or finding of court.

"But whether, upon a petition or bill asserting that his rights have been invaded, a court of equity will interfere to restrain the acts of the party complained of, will depend upon the character and extent of the injury alleged; whether it be irremediable in its nature; whether an action at law would afford adequate remedy; whether the parties are able to respond for the damages resulting from the injury, and other considerations which ordinarily govern a court of equity in the exercise of its preventive process of injunction."[95]

§ 168. **Actions at Law.**—Though every injury to a water right is not a case for an injunction, it does give a right to recover money damages at law, being in the nature of a nuisance.[96] In a suit for damages, the damage must not be alleged as for the value of water at so much per inch or gallon, but for the damage to plaintiff's undertaking, consequent to the loss of the use of the water.[97] For diversion of water from an artifi-

93 Nicholson v. Getchell, 96 Cal. 394, 31 Pac. 265; Johnson v. Superior Court, 65 Cal. 567, 4 Pac. 576.

94 In Allen v. Stowell, 145 Cal. 666, 79 Pac. 371, 68 L. R. A. 223.

95 Atchison v. Peterson, 87 U. S. 507, 22 L. ed. 414.

96 Parke v. Kilham, 8 Cal. 77, 68 Am. Dec. 310; Tuolumne etc. Co. v. Chapman, 8 Cal. 392; McCarthy v. Gaston etc. Co., 144 Cal. 542, 78 Pac. 7.

97 Parks etc. Co. v. Hoyt, 57 Cal. 44.

cial watercourse, the water being personalty, the rule would seem the other way.[98]

§ 169. **Actions to Quiet Title.**—Many suits have been allowed to quiet title to water rights, as to other property.[99] In Katz v. Walkinshaw,[100] it was said, in passing, that a suit will lie by a landowner to have his right to percolating water declared against appropriators, though he has sunk no well, or otherwise made use of it; but that will probably be a matter for further consideration if the case ever arises.

If there are several appropriators or other claimants on the same stream, a suit may be brought to have the rights of all settled and determined. In such a case all parties on the stream must be brought into court.[101] The court must then make a specific finding of the amount to which each is entitled.[102]

"No subject is, perhaps, so prolific of controversies as the use of water by different claimants for irrigation purposes, and a decree concerning it should be as certain as the language can make it."[103] This apportionment may be in time as well as amount, giving each the use of the whole for so many days or hours.[104] In

98 *Supra,* sec. 131.

99 E. g., Peregoy v. Sellick, 79 Cal. 568, 21 Pac. 966; Senior v. Anderson, 130 Cal. 290, 62 Pac. 563.

100 141 Cal. 116, 99 Am. St. Rep. 35, 70 Pac. 663, 74 Pac. 766.

101 Charnock v. Higuerra, 111 Cal. 473, at 481, 52 Am. St. Rep. 195, 44 Pac. 171, 32 L. R. A. 190.

102 Lakeside etc. Co. v. Crane, 80 Cal. 181, 22 Pac. 76.

103 Authors v. Bryant, 22 Nev. 242, 38 Pac. 439.

104 Cave v. Crafts, 53 Cal. 135; Santa Paula Water Co. v. Peralta, 113 Cal. 38, 45 Pac. 168; Rodgers v. Pitt, 129 Fed. 932; Union etc. Co. v. Dangberg, 81 Fed. 73; Craig v. Crafton etc. Co., 141 Cal. 178, 74 Pac. 762. In general, see, also, Frey v. Lowden, 70 Cal. 550, 11 Pac. 838; Steinberg v. Meyer, 130 Cal. 156, 62 Pac. 483; Bledsoe v. Decrow, 132 Cal. 312, 64 Pac. 397; Rose v. Mesmer, 142 Cal. 322,

making the apportionment, the court must confine itself to a declaration of pre-existing rights, not the creation of new ones; and if a stream becomes, from natural causes, insufficient for all claimants, prior appropriators must be given their full amount in their proper order in preference to later claimants.[105]

In partition suits between tenants in common, an actual apportionment, being the creation of separate new right, cannot be made, and the only order will be a sale and a division of the proceeds.[106]

§ 170. Pleading.—Joinder of parties or of causes of action.[107] A count for an injunction may be joined with one for damages.[108] Several owners on the same stream may join as plaintiffs in an injunction suit, or as defendants; but cannot join or be joined in an action for damages.[109] A count for diversion (injury to water right) and for injury to a ditch or other structure used in connection with the water right may be joined but must be separately stated.[110] But in a complaint for diversion and to have the amount of water to which

75 Pac. 905; Suisun v. De Freitas, 142 Cal. 350, 75 Pac. 1092; Miller v. Thompson, 139 Cal. 643, 73 Pac. 583.

105 *Ante*, sec. 142.

106 McGillivray v. Evans, 27 Cal. 92; Lorenz v. Jacobs, 59 Cal. 262; and see *ante*, sec. 49.

107 Many suits have gone off on points of pleading or practice. Some of the more important only are here stated.

108 Jacob v. Lorenz, 98 Cal. 332, 33 Pac. 119; Waterson v. Salunbehere, 101 Cal. 107, 35 Pac. 432; but see Foreman v. Boyle, 88 Cal. 290, 26 Pac. 94, *semble contra*.

109 Barnum v. Hostetter, 67 Cal. 272; Foreman v. Boyle, 88 Cal. 290, 26 Pac. 94; Miller v. Highland etc. Co., 87 Cal. 430, 22 Am. St. Rep. 254, 25 Pac. 550; Schultz v. Winter, 7 Nev. 130; Ronnow v. Delmue, 23 Nev. 29, 41 Pac. 1074; but see Hillman v. Newington, 57 Cal. 56, *contra* concerning suit for damages.

110 Nevada etc. Co. v. Kidd, 37 Cal. 282; Bear River Co. v. Boles, 24 Cal. 359.

plaintiff is entitled determined, these need not be separately stated.[111]

Allegations in complaint. An appropriator's complaint is distinct from one based on riparian rights; and an allegation that plaintiff claims as an appropriator will not allow him to recover as a riparian proprietor or *vice versa*.[112] The appropriator should allege that he is entitled to the use of so much water as an appropriator, not that he is "the owner" thereof.[113] In a complaint for loss of percolating water, it is enough to allege a diversion of water, without specifying the kind of water,[114] showing that, in pleading at least, underground water is treated like water on the surface. The place of use need not be alleged.[115]

In alleging damages, the quantity of water diverted should be alleged, and recovery will be limited to that; but as the allegation of amount of damages is not a material part of a complaint, proof of diversion of less than the precise quantity alleged, while limiting damages thereto, is not a bar to recovery.[116] The damages claimed must be for the injury to plaintiff's enterprise consequent to the loss of the water, not for the value of the water at so much per inch or gallon, since plaintiff does not own the *corpus* of the water, but only a use and flow.[117]

111 Patterson v. Mills, 138 Cal. 276, 71 Pac. 177; and see Silver Creek etc. Co. v. Hayes, 113 Cal. 142, 45 Pac. 191.

112 Riverside etc. Co. v. Gage, 89 Cal. 410, 26 Pac. 889; San Luis etc. v. Estrada, 117 Cal. 168, 48 Pac. 1075; Strong v. Baldwin, 137 Cal. 432, 70 Pac. 288. See Shenandoah etc. Co. v. Morgan, 106 Cal. 409, 39 Pac. 802.

113 Smith v. Green, 109 Cal. 228, 41 Pac. 1022.

114 Katz v. Walkinshaw, 141 Cal. 116, 99 Am. St. Rep. 35, 70 Pac. 663, 74 Pac. 766.

115 Rincon etc. Co. v. Anaheim etc. Co., 115 Fed. 543. *Contra*, Miller v. Rickey, 127 Fed. 573.

116 McDonald v. Bear River Co., 15 Cal. 145.

117 Parks etc. Co. v. Hoyt, 57 Cal. 44.

In an action by a riparian owner, defendant's claim as an appropriator is properly set up by a cross-complaint.[118]

§ 171. **Use of Physical Force.**—The remedy nearest at hand is, usually, a show of physical force on the part of the owner; and this is quite proper, if not overdone. Reasonable physical force may always be used to put trespassers off one's property. In Mechanics' Foundry v. Ryall,[119] the court says this extends to a "*molliter manus imposuit,*" which, translated from the Latin, may be taken, "A gentle use of one's fists." In the following case trespassers entered upon another's land to build a ditch and interfere with water rights and were driven off; whereupon they brought suit. The court says:

"One of the grievances of which the plaintiffs complain is that they were ejected from the possession of certain ground occupied by them for the purpose of constructing a dam and ditch. The object was to divert the water away from the defendants, and we think the plaintiffs have no right to complain of the means adopted to defeat this object. As against the defendants the diversion would have been illegal and we regard their action in the premises as a proper and legitimate mode of averting the injurious consequences."[120]

One may go upon another's land to remove obstructions placed there without being held liable in trespass.[121]

The subsequent appropriators may require the prior one to keep up his dam, or may themselves maintain the dam as they found it at the time of their location.[122]

118 Van Bibber v. Hilton, 84 Cal. 585, 24 Pac. 308, 598.

119 75 Cal. 601, 17 Pac. 703.

120 Butte etc. Co. v. Morgan, 19 Cal. 609, at 616. See, also, McCarty v. Fremont, 23 Cal. 196.

121 Ennor v. Raine (Nev.), 74 Pac. 1.

122 Lobdell v. Simpson, 2 Nev. 274, 90 Am. Dec. 537.

§ 172. **Crimes.**—Under the Penal Code of California, there are the following crimes peculiar to this subject: Under section 347, poisoning water in any spring, well, or reservoir, is a State's prison offense, and under section 374, fouling the water by putting offal or filth into any stream, pond, lake or reservoir, is a misdemeanor. An example of this is herding a band of sheep daily to a stream which they defile.[123] Under section 499, stealing water from flumes, pipes, etc., is a misdemeanor. Under sections 592 and 607, destroying or injuring flumes, reservoirs, etc., is a misdemeanor. Maintaining appliances injurious to fish is a misdemeanor.[124]

These crimes do not exclude the equitable jurisdiction to restrain the same acts as nuisances in a civil suit.[125]

Under the recent Irrigation Codes of the arid States there are many criminal provisions in the nature of police regulations; such as waste of water, interference with headgates or measuring devices, or obstruction of officials in their work.[126]

123 People v. Borda, 105 Cal. 636, 38 Pac. 1110.

124 Pen. Code, 629.

125 People v. Truckee Lumber Co., 116 Cal. 397, 58 Am. St. Rep. 183, 48 Pac. 374, 39 L. R. A. 581; Spring Valley etc. Works v. Fifield, 136 Cal. 14, 68 Pac. 108.

126 See Appendix and *infra*, sec. 177.

CHAPTER X.

SUPERVISION OF APPROPRIATORS—IN STATES ADOPTING IRRIGATION CODES.

§ 173. Introductory.
§ 174. Supervision of State.
§ 175. Intermediate subdivisions.
§ 176. Primary subdivisions.
§ 177. Police regulations.

§ 173. All waters are, in States adopting irrigation codes, declared subject to the control of the State for the benefit of the people, though the form of words differs: "Dedicated to the use of the people";[1] or "Water for irrigation is a natural want"; and the works therefor are "works of internal improvement,"[2] or "Are subject to regulation and control by the State."[3] "The use of water for a beneficial purpose is a public use."[4] In the Idaho constitution it is declared that the use of water is a public use and subject to the regulation and control of the State.[5] Similar provisions exist in most States.

"In the progress of our legislation in respect to the use of water for irrigation and other beneficial purposes, the significant feature of the changes and additions from time to time has been the principle of centralized public control and regulation. One can hardly

1 Colo. Const., art. 16, sec. 5.
2 Neb. Comp. Stats. 1903, 6456, 6473.
3 Nevada Comp. Laws, 1900, sec. 354.
4 Utah Stats. 1905, c. 108, sec. 50; and see Wyo. Const., art. 1, sec. 13; and declarations of State ownership, *ante*, sec. 25.
5 Idaho Const., art. 15, sec. 1.

fail to be impressed with the gradual tendency exhibited in the various acts toward the greater effectiveness of public supervision."[6]

§ 174. **Supervision of State.**—The general supervision over the whole State is placed either in a special board, or in the State Engineer. For example, it is in a State Board of Irrigation in Nebraska,[7] consisting of the governor, attorney general, and commissioner of land;[8] a State Board of Irrigation in Nevada, consisting of the governor, attorney general and surveyor general;[9] in a State Board of Control in Wyoming, consisting of a State engineer and division superintendents.[10] It is in the State Engineer in Colorado[11] and Utah.[12] There is in Idaho a State Board of Irrigation consisting of the State Engineer and the three water commissioners;[13] but the functions of this board seem less than in the other States where boards are constituted. They meet once a year, no session exceeding five days.[14]

In exercising this general supervision, general control may be exercised over all the waters, surveys and inspections made, and general rules and regulations established, and the administration of priorities (as elsewhere determined) provided for.

Where the general control is in a board, an executive officer is also provided having general powers to see to the execution of the orders of the board. This is the

6 Farm Inv. Co. v. Carpenter, 9 Wyo. 110, 87 Am. St. Rep. 918, 61 Pac. 258, 50 L. R. A. 747.

7 Comp. Stats. 1903, sec. 6412.

8 *Ibid.*

9 Stats. 1901, p. 72.

10 Wyo. Const., art. 8, sec. 2.

11 3 M. A. S., 1905 ed., 2447h, 2286c.; M. A. S. 2459.

12 Stats. 1905, c. 108, secs. 1-3.

13 *Infra.*

14 Stats. 1903, p. 223, sec. 22.

State Engineer in Nevada;[15] in Nebraska it is the secretary of the board;[16] in Wyoming it is the State Engineer, who is the president of the Board of Control.[17]

§ 175. **Intermediate Subdivisions.**—The whole State is usually divided into intermediate subdivisions. These are called water or irrigation divisions and an executive officer is provided for each division. For example, in Colorado they are called irrigation divisions, of which there are five, and the executive of each is called "irrigation division engineer."[18] In Nebraska there are two, called "water divisions," and the executive officer for each is called "under-secretary for the division."[19] In Utah there are five, called "water divisions," and the executive officer for each is called "division superintendent."[20] In Wyoming there are four, called "water divisions," and the executive for each, called "division superintendent."[21] The State in Idaho is, by the statute, divided into three water divisions, numbered 1, 2, 3, with one "water commissioner" for each division, to hold office for six years.[22]

The division executive has general control over the waters within his division, similar to that of the State Board or State Engineer over the State, and may make rules and regulations for his division, subject to the control of the higher authorities and appeal to them.

§ 176. **Primary Subdivisions.**—The direct primary administration rests in a further and subordinate subdivi-

15 Stats. 1903, p. 18, sec. 5.
16 Comp. Stats. 1903, sec. 6425.
17 Wyo. Const., art. 8, sec. 5.
18 3 M. A. S., 1905 ed., 2440 et seq.
19 Comp. Stats. 1903, secs. 6409, 6419 et seq.
20 Stats. 1905, c. 108, secs. 26-30.
21 Const., art. 8, sec. 4; Rev. Stats., 848.
22 Stats. *supra*, secs. 13-18.

sion of the divisions into districts, with an executive officer for each district. Thus, in Colorado these districts are called "water districts" (called "unincorporated," to distinguish them from irrigation districts, based on the Wright Act of California). There are sixty-eight of these established by statute, according to the locations of water supplies.[23] The executive for each is called "water commissioner."[24] In Nebraska the State Board of Irrigation may create water districts as necessity arises, and the executive officer thereof is called "under-assistant for the district."[25] In Nevada, the State Board of Irrigation shall divide the whole State into subdivisions, called "water subdivisions," the executive for each being called "water commissioner."[26] This is the only subdivision of the State in Nevada, intermediate division being omitted. In Utah the State Engineer shall subdivide the divisions into districts as necessity arises, appointing one executive called "supervisor" for each.[27] In Wyoming the State Board of Control may subdivide the divisions into water districts as necessity arises, with one water commissioner for each district.[28] In Idaho the Board of Irrigation shall divide the State into "water districts" from time to time as priorities become adjudicated, with one "master" for each, appointed by the water commissioner of the division and holding office for one year; in some cases elected by the appropriators.[29]

With the executive of the district lies the direct immediate supervision of the owners, and direct adminis-

23 M. A. S. 2310 et seq.
24 M. A. S. 2384, 2381.
25 Comp. Stats. 1903, secs. 6441, 6442.
26 Stats. 1901, p. 72.
27 Stats. 1905, c. 108, sec. 26 et seq.
28 Rev. Stats. 888, 889.
29 Stats. *supra*, secs. 23, 24.

tration and control of the use of the waters, and the enforcement of the rules and regulations of his superiors, subject to appeal to them.

§ 177. **Police Regulations.**—To enable the district executive to perform his duties, owners are required to keep headgates and measuring devices, so that the water may be measured, shut off, etc. A failure to maintain such devices is punishable criminally in Nebraska[30] and Utah,[31] and in Wyoming, Nebraska and Colorado, the water may be shut off.[32] In general, obstructing the work of the officials is punishable criminally.[33] The district officers may make arrests in Colorado, Nebraska and Wyoming.[34] Waste of water is punishable criminally in Colorado, Nebraska, and Nevada.[35] Similar provisions exist in Idaho; and in the other States and Territories having irrigation codes.[36]

30 Comp. Stats. 1903, secs. 6443, 6445.

31 Stats. 1901, c. 100, sec. 53.

32 Wyo. Stats. 1901, p. 99; Neb. Comp. Stats. 1903, sec. 6443; Colo. 5 M. A. S., 1905 ed., 2286.

33 Neb. Comp. Stats. 1903, secs. 6407, 6443, 6445; Nev. Stats. 1903, p. 18, sec. 20; Utah Stats. 1905, c. 108, sec. 64; Wyo. Rev. Stats. 971; Stats. 1901, p. 95.

34 Colo. M. A. S. 2384, 2386; Neb. Comp. Stats. 1903, sec. 6443; Wyo. Rev. Stats. 972.

35 Colo. M. A. S. 2384; Neb. Comp. Stats. 1903, sec. 6407; Nev. Comp. Laws, 1900, secs. 430, 431.

36 See *ante*, sec. 20.

CHAPTER XI.

ADJUSTMENT OF EXISTING PRIORITIES—IN STATES ADOPTING IRRIGATION CODES.

§ 178. Introductory.

A. BY THE BOARD OR STATE ENGINEER.

§ 179. Preparatory steps.
§ 180. Procedure.
§ 181. Certificate.

B. BY DECREE OF COURT.

§ 182. Preparatory steps.
§ 183. Procedure on suit.
§ 184. Decree and certificate.

§ 178. A census, determination and listing is made of all existing appropriations in the States adopting irrigation codes. The duty of doing this rests, in some States (Nebraska, Nevada, New Mexico and Wyoming), with the head of the administrative organization; in others (Colorado, Idaho, North Dakota, Oklahoma, South Dakota and Utah) with the courts, by special proceedings. In all except Colorado it is done on the State's initiative. In Idaho, partially so.

Determination of existing priorities is also rested with the Board of Control in the recent statute of New Mexico.[1] The method of adjudicating existing priorities by decree of court is in force also under recent statutes in South Dakota[2] and Oklahoma.[3]

In Farm Inv. Co. v. Carpenter, 9 Wyo. 110,[4] it is said:

1 Stats. 1905, p. 270, sec. 29.
2 Stats. 1905, p. 201, c. 132, sec. 15.
3 Stats. 1905, p. 274, c. 21, sec. 5 et seq.
4 87 Am. St. Rep. 918, 61 Pac. 258, 50 L. R. A. 747.

"The special proceeding for adjudication was purely statutory, and the only reason for its creation is to be found in the inability of the ordinary procedure and processes of the law to meet the necessities pertaining to the segregation by various individuals or companies of water from the same stream, by separate ditches or canals, and at different points along its course, under rights by appropriation to so divert and use the water. A similar proceeding in Colorado has been held to be based upon or to grow out of the police power of the State."[5]

A. BY THE BOARD OR STATE ENGINEER.

§ 179. **Preparatory Steps.**—In Nevada, the State Engineer sends out blanks to be filled up by all existing claimants, and sworn to, and he collects all existing decrees of courts and other data available, and prepares complete maps.[6] In Wyoming, a notice of investigation is published for each stream, and all claimants then fill out sworn statements on blank forms, and the division superintendent then takes all evidence available, surveying the stream and examining claimants.[7]

§ 180. **Procedure.**—In Nebraska, the whole procedure is left to the determination of the State board, subject to appeal to the courts.[8] In Nevada, from the data collected as above, the State Engineer prepares a list of

5 Citing Farmers' Independent Ditch Co. v. Agricultural Ditch Co., 22 Colo. 513, 55 Am. St. Rep. 149, 45 Pac. 444; White v. Farmers' High Line Canal etc. Co., 22 Colo. 191, 43 Pac. 1028, 31 L. R. A. 828. See, also Louden etc. Canal Co. v. Handy Ditch Co., 22 Colo. 102, 110, 43 Pac. 535.

6 Nev. Stats. 1903, p. 18.

7 Wyo. Rev. Stats., 861 et seq.

8 Comp. Stats. 1903, secs. 6424, 6427.

priorities and issues certificates, subject to action against him in the courts.[9] In Wyoming, the evidence gathered as above by the division engineer is placed before the State Engineer, who prepares maps therefrom. The maps and other data are then all placed before the Board of Control, which adjudges the right of each claimant, subject to a rehearing or an appeal to the courts within one year.[10]

§ 181. **Certificates.**—In Nebraska, the priorities thus determined are recorded in the office of the State Board, and a certificate issued to the appropriator.[11] In Nevada, the list prepared by the State Engineer as above is recorded with the county recorder, and that list is relied on thereafter.[12] Certificates are also issued to the appropriators.[13] In Wyoming, the Board of Control issues a certificate of priority, which is recorded with the county clerk.[14]

B. BY DECREE OF COURT.

§ 182. **Preparatory Steps.**—In Utah, the State Engineer must make a complete survey of each river system or water source of the State, beginning with those most used for irrigation, collecting all data available. He must publish a notice in a newspaper for fifteen days before commencing on any system.[15] He files the results with the clerk of the district court, which shall then have exclusive jurisdiction to determine priorities

9 Stats. 1903, p. 18.
10 Rev. Stats. 872, 874, 883; Stats. 1901, p. 70.
11 Neb. Comp. Stats. 1903, secs. 6427, 6429.
12 Stats. 1903, p. 18.
13 *Ibid.*
14 Rev. Stats. 873.
15 Stats. 1905, c. 108, secs. 6, 7.

of right on that stream,[16] and the clerk of the court then publishes notice in a newspaper requiring all claims to be filed within six months. A sworn statement is filled out by each claimant, and all are tabulated by the State Engineer.[17] In Colorado, the proceedings are not on the initiative of the State, but are begun by some claimant on the stream filing suit to have his right determined.[18] In Idaho, provisions based on the Colorado statutes were enacted in the Code of Civil Procedure;[19] but the new statute provides for the initiative of the State on streams not yet adjudicated. For all such streams the water commissioner must bring suit in the district court against all claimants, and after filing the suit, make an examination and survey of the stream and gather all available information and present it to the court.[20] In some of the other States the suit is brought in the name of the attorney general. (See Appendix.)

§ 183. **Procedure on Suit.**—In Colorado, the proceedings are upon the initiative of some claimant. He makes an application to the court and notice is published.[21] The form of hearing is specially provided for,[22] and the judge may order it before a referee, in which case the form of hearing is likewise specially provided for.[23] A specific decree is then rendered. An appeal may be taken to the Supreme Court.[24] In Utah,

16 *Ibid.*, sec. 11.
17 *Ibid.*, sec. 13.
18 M. A. S. 2403 et seq.
19 (1901), sec. 3791.
20 Stats. 1903, p. 223, secs. 34 et seq., 37, as amended 1905, p. 357.
21 M. S. A. 2405 et seq.
22 M. A. S. 2403.
23 M. A. S. 2409 et seq.
24 M. A. S. 24 et seq.

the court may then appoint a referee or may determine priorities without a referee.[25] The statements filed by claimants stand in place of pleadings. Testimony may be taken at such places as advisable, giving notice to claimants as each claim comes up.[26] Any interested party may file a contest.[27]

§ 184. **Decree and Certificate.**—In Colorado, the clerk of the court issues a certificate of the decree, and the holder files this with the water commissioners of his district, and this is relied on by them.[28] It is recorded.[29] The State Engineer and the division engineer each keep a list of the decreed priorities.[30] In Utah, the decree is rendered by the court upon the findings of the referee, if satisfactory to the court, subject to appeal to the supreme court.[31] A certificate is then issued in duplicate to each owner containing the facts stated in the decree. One copy is to be recorded within thirty days with the county recorder, and the other with the State Engineer. Similar steps are taken in the other States following this method.

In Colorado, a similar proceeding is specially provided for other uses than irrigation,[32] though usually these provisions are originally made to cover all uses of water. In Colorado a similar procedure is likewise specially provided for changes in the place of diver-

25 Stats. 1905, c. 108, secs. 15, 17.

26 *Ibid.*, sec. 18.

27 *Ibid.*, sec. 19.

28 M. A. S. 2404, 2408.

29 M. A. S. 2404.

30 3 M. A. S., 1905 ed., 2447i.

31 Stats. 1905, c. 108, secs. 21-23.

32 3 M. A. S., 1905 ed., 2399a et seq.

sions.[33] The court method is expressly made exclusive in all these matters.[34]

In all the States the result aimed at is the issuance and recording of consecutively numbered certificates of priority.

The States referred to above are selected as examples of the two methods. For other States, reference should be made to the statutes of each referred to in Appendix B.

The first method described above (determination by the board) was in Wyoming held not to be conclusive, and the question could be again opened by suit in court,[35] but the Nebraska court has taken the view evidently intended by the legislature, and has held the decision of the board final, and not open to collateral attack.[36]

33 3 M. A. S., 1905 ed., 2273d et seq.

34 3 M. A. S., 1905 ed., 2339.

35 Ryan v. Tutty (Wyo.), 78 Pac. 661.

36 Farmers' Irr. Dist. v. Frank (Neb.), 100 N. W. 286.

The second method above referred to, that is, the method by proceedings in court, should be compared with section 169, *ante*.

CHAPTER XII.

LOSS OF RIGHT.

§ 185. Introductory.

A. ABANDONMENT.

§ 186. Abandonment is voluntary and a question of fact.
§ 187. Recapture.
§ 188. Parol sale or faulty deed.
§ 189. Failure of diligence in construction work.
§ 190. Non-user.
§ 190a. Same.
§ 191. Discharged waste.

B. FORFEITURE.

§ 192. Failure to comply with statute in making an appropriation
§ 193. Smith v. Hawkins.
§ 193a. Forfeiture under irrigation codes.

C. ADVERSE USE.

§ 194. In general.
§ 195. No need of statutory appropriation.
§ 196. Use of water for a beneficial purpose.
§ 197. Continuous for five years.
§ 198. Hostile invasion of right of true owner.
§ 199. Open and "not clam."
§ 200. Chance to prevent.
§ 201. Uninterrupted.
§ 202. Payment of taxes.
§ 203. Against the United States.
§ 204. Conclusion.

D. ESTOPPEL.

§ 205. Estoppel.

E. EMINENT DOMAIN.

§ 206. Eminent domain.

§ 185. Water rights of appropriation may, it is true, continue indefinitely, but they may likewise come to an

end in several ways; viz., by abandonment, forfeiture, adverse use, estoppel or eminent domain proceedings.[1]

A. ABANDONMENT.

§ 186. **Abandonment is Voluntary and a Question of Fact.** To constitute abandonment there must be a concurrence of act and intent so that abandonment is always voluntary and a question of fact.[2] The accomplishment of one's purpose is strong evidence. If the appropriators disperse, the mine for which they used the water being worked out, the ditches decayed, and two years go by without doing anything, they have abandoned their water right.[3] This is a typical case of abandonment.[4]

An abandonment of a ditch, however, does not necessarily involve an abandonment of the water right.[5] The distinction between the water right and the ditch or other appliances must be borne in mind.[6]

The right once abandoned, it cannot be revived by a sale and the sale passes nothing.[7]

§ 187. **Recapture.**—Abandonment is always a question of intention. If discharge of water is made not be-

1 Matters are considered here that are sometimes considered under the title "How the Right may be Maintained," being the converse of loss of right.

2 Utt v. Frey, 106 Cal. 397, 39 Pac. 807, quoted *infra*, sec. 190.

3 Davis v. Gale, 32 Cal. 26, 91 Am. Dec. 554.

4 For similar cases where the ditch, etc., was allowed to decay, see Dorr v. Hammond, 7 Colo. 79, 1 Pac. 693; Sieber v. Frink, 7 Colo. 148, 2 Pac. 901; Goon v. Proctor, 27 Mont. 526, 71 Pac. 1003.

5 New Mercer Ditch Co. v. Armstrong, 21 Colo. 357, 40 Pac. 989; Kleinschmidt v. Greiser, 14 Mont. 484, 43 Am. St. Rep. 652, 37 Pac. 5; Wood v. Etiwanda Water Co., 147 Cal. ——, 30 Cal. Dec. 14, 81 Pac. 512; McGuire v. Brown, 106 Cal. 660, 39 Pac. 1060, 30 L. R. A. 384.

6 But see Smith v. Hawkins, 110 Cal. 122, 42 Pac. 453, *dictum contra*.

7 Davis v. Gale, 32 Cal. 26, 91 Am. Dec. 554; Kirman v. Hunn will, 93 Cal. 519, 29 Pac. 124.

cause it is waste, but for convenience in handling it, intending at the time to recapture it at some lower point, it is not abandoned. Water can be discharged into a stream as a link in a ditch line and taken out again, though there are prior appropriators on the same stream. It is not abandoned where there is an intent to recapture it.[8] In a very early California case Mr. Justice Stephen Field, delivering the opinion of the court, said:

"In the case at bar the channel of the south fork of Jackson Creek is used as a connecting link between the Amador County canal and the ditch of the defendants. The water from the canal is emptied into the fork with no intention of abandoning its use, but for the sole purpose of supplying the ditch. . . . . There may be some difficulty in cases like the present, in determining with exactness the quantity of water which parties are entitled to divert. Similar difficulty exists in the case of a mixture of wheat and corn—the quantity to be taken by each owner must be a matter of evidence. The courts do not, however, refuse the consideration of such subjects, because of the complicated and embarrassing character of the questions to which they give rise. If exact justice cannot be obtained, an approximation to it must be sought, care being taken that no injury is done to the innocent party.[9] The burden of proof rests with the party causing the mixture.[10] He must show clearly to what portion he is entitled. He can claim

8 Hoffman v. Stone, 7 Cal. 46; Butte etc. Co. v. Vaughn, 11 Cal. 143, 70 Am. Dec. 769; Davis v. Gale, 32 Cal. 26, 91 Am. Dec. 554; Cal. Civ. Code, 1413. See South Dakota Stats. 1905, p. 201, sec. 4; Oklahoma Stats. 1905, p. 274, sec. 3. The point is usually covered under the recent statutes of the various states in accord with the above decisions. (See Appendix B.)

9 Accord Burnett v. Whitesides, 15 Cal. 35.

10 Accord Wilcox v. Hausch, 64 Cal. 461, 3 Pac. 108.

only such portion as is established by decisive proof. The enforcement of his right must leave the opposite party in the use of the full quantity to which he was originally entitled."[11]

In one case[12] the same principle was applied to the increase of a stream that had been "developed" by tunneling; and in another[13] where the increment was introduced by merely clearing out a choked channel.[14]

The channel, so far as it is a conduit for the water to be recaptured, is treated on the principles of artificial watercourses, and the water to be recaptured, as personalty.[15]

§ 188. **Parol Sale or Faulty Deed.**—Owing to the insistence in the early days on the personal license side of possessory rights on the public domain, a conveyance operated on the principle of surrender and admittance, the grantor abandoning, and the grantee receiving his right because of his newly acquired possession. A sale of a possessory right was an unequivocal sign of intent to relinquish on the grantor's part, and hence was evidence of an abandonment.[16] To-day possessory rights have been so far raised into the dignity of real estate that a sale will, if in writing so as to satisfy the statute of frauds, operate as a transmission of title, like any other conveyance, without loss of priority. But still the old view obtains where the sale is by parol, or by

11 Butte C. & D. Co. v. Vaughn, 11 Cal. 143, 70 Am. Dec. 769.

12 Mayberry v. Alhambra etc. Co., 125 Cal. 444, 54 Pac. 530, 58 Pac. 68.

13 Page v. Rocky Ford etc. Co., 83 Cal. 84, 21 Pac. 1102, 23 Pac. 875.

14 In general accord, Oppenlander v. Left Hand Ditch Co., 18 Colo. 142, 31 Pac. 854.

15 *Ante*, sec. 133.

16 *Ante*, sec. 123; Black v. Elkhorn Min. Co., 163 U. S. 445, 16 Sup. Ct. Rep. 1101, 41 L. ed. 221.

faulty deed. Such a sale is not inoperative. It constitutes an abandonment on the part of the grantor, and the creation of a new right in the grantee as a new appropriator by actual diversion. Priority is lost. Such a sale does not operate as an abandonment, however, until completed by putting the grantee in possession. The mere attempt to abandon (or an unsuccessful attempt at a parol sale) is not enough without the actual relinquishment of possession.[17]

§ 189. **Failure of Diligence in Construction Work.**—An appropriator seeking the benefit of the doctrine of relation loses the benefit of that doctrine if he fails to use diligence in building his ditches and other construction work. But this is not a question of abandonment. It is matter precedent showing that no right was ever obtained against the other claimant who has performed the requisite formalities.[18] The two principles should be kept distinct. That this does not rest on abandonment is specially shown by the rule that the failure of diligence is immaterial if the diversion and use are nevertheless completed before others intervene.[19] The matter has already been discussed at length.[20]

§ 190. **Non-user.**—With the exception noted below, the decisions agree that the question of non-user of water is the simple one of whether the non-user was for an unreasonable time under the circumstances, so as to reasonably indicate an intent to cease using the water for a beneficial purpose; a simple question for the jury similar to the question of the use of reasonable care left to the jury in the law of negligence. Where the

17 The cases are cited *ante*, sec. 123.
18 Nevada etc. Co. v. Kidd, 37 Cal. 282.
19 Wells v. Mantes, 99 Cal. 583, 34 Pac. 324.
20 *Ante*, chapter VI. See, also, *infra*, sec. 192.

non-user is for an unreasonable time, taking all the surrounding circumstances into consideration, there is an abandonment of the water right; on the other hand, if it appears to be a reasonable time, there is not. The cases agree upon this with one exception noted below.

The decisions to this effect may be divided into two classes:

(1) If at the start, the water right having been newly acquired by completion of the preparatory work, there is a failure for an unreasonable time under the circumstances to apply the water to a useful purpose, there is an abandonment. No definite period of time is set in the cases generally. The non-user is not conclusive, but a question depending on (under the facts of each case) what is an unreasonable delay; that is, what non-user under the circumstances reasonably indicates the intent, in that case, not to apply the water to a useful purpose.[21]

(2) A temporary non-user later owing to breakage of apparatus, during change of plans, or from other temporary cause. Here again the rule of the cases generally is that no definite time is set. The non-user being for a reasonable time under the circumstances of each case, there is no abandonment.[22] If work is stopped because the stream ceases to flow (act of God) or because of tunneling (*i. e.,* tortious act) of third person, there is no abandonment.[23] But if unreasonably continued, here again it will be evidence (not conclusive, but taken with all the circumstances of the case) of an intent not to apply the water to a useful purpose, and

[21] Senior v. Anderson, 115 Cal. 496, 47 Pac. 454; Senior v. Anderson, 130 Cal. 290, at 296, 62 Pac. 563. And *ante,* secs. 109, 145, 146.

[22] Lobdell v. Hall, 3 Nev. 507.

[23] Santa Barbara v. Gould, 143 Cal. 421, 77 Pac. 151.

an abandonment.[24] During the temporary cessation of use, others may use the water.[25]

The rule concerning non-user is thus summed up in Utt v. Frey, 106 Cal. 397, 38 Pac. 807:

"The right which is acquired to the use of water by appropriation may be lost by abandonment. To abandon such right is to relinquish possession thereof without any present intention to repossess. To constitute such abandonment there must be a concurrence of act and intent, viz., the act of leaving the premises or property vacant, so that it may be appropriated by the next comer, and the intention of not returning.[26] The mere intention to abandon, if not coupled with yielding up possession or a cessation of user, is not sufficient; nor will the non-user alone without an intention to abandon be held to amount to an abandonment. Abandonment is a question of fact to be determined by a jury or the court sitting as such. Yielding up possession and non-user is evidence of abandonment, and under many circumstances sufficient to warrant the deduction of the ultimate fact of abandonment. But it may be rebutted by any evidence which shows that, notwithstanding such non-user or want of possession, the owner did not intend to abandon."[27]

24 Bear River etc. Co. v. Boles, 24 Cal. 359; Nevada etc. Co. v. Kidd, 37 Cal. 282, at 313; *ante*, sec. 186.

25 *Ibid;* and *ante*, sec. 31.

26 Citing Judson v. Malloy, 40 Cal. 299; Bell v. Bed Rock etc. Co., 36 Cal. 214; Moon v. Rollins, 36 Cal. 333, 95 Am. Dec. 181; St. John v. Kidd, 26 Cal. 272; Richardson v. McNulty, 24 Cal. 345; Willson v. Cleveland, 30 Cal. 192.

27 Accord Pomeroy on Riparian Rights, sec. 90; Farnham on Waters, sec. 691; accord Dorr v. Hammond, 7 Colo. 79, 1 Pac. 693; Sieber v. Frink, 7 Colo. 149, 2 Pac. 901; Welch v. Garrett, 5 Idaho, 639, 51 Pac. 405; Integral Co. v. Altoona Co., 75 Fed. 379, 21 C. C. A. 409; North American etc. Co. v. Adams, 104 Fed. 404, 45 C. C. A. 185; 17 Ency. of Law, 517, citing cases.

§ 190a. Same.—Like the rule of reasonable care in the law of negligence, the rule of reasonable time here is indefinite. In cases where there is no evidence of importance bearing on the surrounding circumstances it would be difficult for the jury to say whether the non-user was for an unreasonable time. It would be enough in such cases to say, as in the law of negligence, that the side claiming there is an abandonment, having failed to convince the jury of the unreasonable length of the non-user, has failed to sustain the burden of proof, and failed to make out its case.[28] An attempt has been made to cover such a case by a resort to a presumption of abandonment from non-user.[29] This was early rejected in California.[30]

The later case of Smith v. Hawkins[31] treats the matter and avoids the difficulty in an entirely new way; viz., on the principles not of abandonment at all, but of forfeiture. This case arbitrarily selects five years as a limit of non-user under any circumstances. The test of intent is then rejected and the principles of forfeiture acting *in invitum* substituted.

Accepting Smith v. Hawkins as law, the rule, as stated above, that non-user must be considered on the principles of abandonment under the test of reasonableness remains unaffected, so long as five years have not elapsed. This is acknowledged in Smith v. Hawkins. That case merely introduces a new principle governing the case at the expiration of the five-year period. That case is further considered below.[32]

28 Beaver etc. Co. v. St. Vrain etc. Co., 6 Colo. App. 130, 40 Pac. 1066; Platte etc. Co. v. Central etc. Co., 32 Colo. 102, 75 Pac. 391.

29 Kinney on Irrigation, sec. 257; Sieber v. Frink, 7 Colo. 148, 2 Pac. 901.

30 Partridge v. McKinney, 10 Cal. 181.

31 *Infra*, sec. 193.

32 Sec. 193.

The introduction of the principle that non-user after a definite period of time operates as a forfeiture as distinguished from abandonment was hence introduced in California only recently, and by a decision of the court, not by legislation. In the recent irrigation codes of the arid States this new principle usually finds a place also, as considered below.

§ 191. **Discharged Waste.**—Where water has been severed from the natural stream and used in an artificial watercourse, such as a ditch or flume, we have seen that it has become personal property, not longer subject to the law of natural waters. In discharging it as waste from the ditches, etc., the question is not one of abandonment of a water right, but of abandonment of specific personal property, viz., the very particles of water that are discharged. The question is of importance here, though it should be noticed that it turns on the law of artificial watercourses, and not on the law of natural waters.

There is an abandonment of whatever runs waste after use. When the owner has made all the use of the water he wants, and lets the waste run off from ditches, etc., without intent to recapture, the waste is abandoned, and the owner of the water right no longer had any claim upon it.[33] If it finds its way by natural channels into another creek, he cannot go there and reclaim it as against other appropriators there who make use of it.[34] If a miner digs a ditch to drain away the water from a stream so that the bed can be mined, the water is abandoned.[35]

33 Dougherty v. Creary, 30 Cal. 290, 89 Am. Dec. 116; Davis v. Gale, 32 Cal. 26, 91 Am. Dec. 554.

34 Eddy v. Simpson, 3 Cal. 249, 58 Am. Dec. 408; Schulz v. Sweeney, 19 Nev. 359, 3 Am. St. Rep. 888, 11 Pac. 253.

35 McKinney v. Smith, 21 Cal. 374.

The abandonment from an artificial watercourse is, however, only of the specific water allowed to run waste,—not of any of the incoming water, owing to the distinction of the water as personalty in the artificial watercourse, and the water right itself as an intangible use and flow. One may cease the abandonment of waste from a ditch, and so use the water that none of it thereafter runs waste at all,[36] or so that it runs off in a new place where people below no longer can get it.[37] No permanent right to have the discharge continued can be acquired either by estoppel or prescription, even though the lower claimants had built expensive flumes or ditches to catch the waste.[38]

Again it should be repeated that this rule deals only with waste discharged from an artificial watercourse. Rights in the surplus flow of the natural stream itself may well be acquired by lower claimants, as has been discussed under the question of successive appropriators. The lower claimants may appropriate the surplus of the natural flow,[39] to which they will have a vested right that others cannot deprive them of by changing their place of use, or in any other way.

Between the case of lower claimants to the natural stream and the case of lower claimants to artificial dis-

36 Hanson v. McCue, 42 Cal. 303, commented on in Katz v. Walkinshaw, 141 Cal. 116, at 129, 99 Am. St. Rep. 35, 70 Pac. 663, 74 Pac. 766.

37 Correa v. Frietas, 42 Cal. 339.

38 Dougherty v. Creary, 30 Cal. 290, 89 Am. Dec. 116; Stone v. Bumpus, 40 Cal. 428; Stockman v. Riverside etc. Co., 64 Cal. 57, 28 Pac. 116; Anaheim etc. Co. v. Semi-Tropic Co., 64 Cal. 185, 30 Pac. 623; Lux v. Haggin, 69 Cal. 255, at 266, 278, 10 Pac. 674 (disapproving Parke v. Kilham, 8 Cal. 77, 68 Am. Dec. 310, on this point); Lakeside etc. Co. v. Crane, 80 Cal. 181, 22 Pac. 76; Hargrave v. Cook, 108 Cal. 72, 41 Pac. 18, 30 L. R. A. 390. See Arkwright v. Gell, 5 Mees. & W. 226; and see *ante*, sec. 132.

39 Barneich v. Mercy, 136 Cal. 205, 68 Pac. 589; and see Ball v. Kehl, 95 Cal. 606, 30 Pac. 780; *ante*, sec. 29; and *infra*, sec. 194 et seq.

charge from a ditch is the intermediate case of lower claimants on a natural stream into which the waste from a ditch has been discharged. Are these lower claims to be viewed as claims to an artificial source of supply on the principles just stated of discharge from ditches, or as claims to a natural source of supply giving vested rights? The view that is most just, and that seems to prevail, is the latter. Lower claimants on the natural streams need not look beyond the fact that the conditions at their point are those of a natural stream. The waste discharged into the stream above may have been originally diverted from that very stream; or, in any event, the effect below is entirely the same as though the increment were a natural tributary. When claimants have been using the water on the natural stream below, the upper discharge into the stream cannot be cut off. It is not treated as an artificial discharge of waste, to which no permanent rights can attach, but becomes part of the natural flow by accession,[40] to which lower rights attach on the principles of successive appropriators. The place of use by the one above who has been thus discharging his waste water into a natural stream cannot be changed if thereby the discharge into the stream is discontinued, or lower claimants are thereby injured in any other way, under the principles already discussed under "change of place of use."[41]

B. FORFEITURE.

§ 192. **Failure to Comply with Statute in Making an Appropriation.**—Section 1419 of the Civil Code of California is as follows: "Forfeiture. A failure to comply with such rules deprives the claimants of the right to the use of the water as against a subsequent claimant who

40 Butte etc. Co. v. Vaughn, 11 Cal. 143, 70 Am. Dec. 769.

41 Last Chance etc. Co. v. Bunker Hill etc. Co. (C. C. Idaho), 49 Fed. 430; Gassert v. Noyes, 18 Mont. 216, 44 Pac. 959.

complies therewith." The rules mentioned are those governing how an appropriation is to be made.

We have already discussed the cases construing this section, the result being seen that the word "claimants" here used means only those who are engaged in the preparatory work, and seek the benefit of the doctrine of relation. It does not apply to an appropriator by actual diversion,[42] and the section ceases to be applicable after an appropriation is once completed.

A completed appropriation is hence not within that section, and so there is not, by this section, any statutory forfeiture of a right once acquired, as distinguished from abandonment, in those States where this section is copied.

Such, also, would seem to be the case under those irrigation codes which (as already discussed) include the actual application of the water to a beneficial use within a stated time as a prerequisite to the issuance of a license. A failure to make such application of the water would have the result that no water right was completed, rather than that a completed one was forfeited.

§ 193. **Smith v. Hawkins.**—If there is any such thing as forfeiture of a water right, as distinguished from abandonment, it rests, in California, on Civil Code, section 1411, as construed in Smith v. Hawkins, 110 Cal. 122, 42 Pac. 453. The distinction on principle would be a loss of the right *in invitum*, as distinguished from a voluntary act. Where mere non-user and no other important evidence, the jury have difficulty in saying when that continuance of non-user is unreasonable. In Smith v. Hawkins the difficulty is cut short at the end of five years. Non-user for five years was held to constitute

42 De Necochea v. Curtis, 80 Cal. 397, 20 Pac. 563, 22 Pac. 198; Wells v. Mantes, 99 Cal. 583, 34 Pac. 324; *ante*, chapter VI.

a loss of right not by abandonment, and hence irrespective of intention, but by forfeiture, *in invitum*. This relieves the jury of a difficult question of fact, but it is an entire departure from the older cases, which left it to the jury, however short or long the time. Smith v. Hawkins, however, is such a flat decision upon the point, fixing a limit of five years, that, though open to the charge of judicial legislation, it is likely to be followed. The material part of the opinion in Smith v. Hawkins is as follows:

"Section 1411 of the Civil Code declares that the appropriation must be for some useful or beneficial purpose, and when the appropriator or his successor in interest ceases to use it for such a purpose, the right ceases. This section deals with the forfeiture of a right by non-user alone. We say non-user, as distinguished from abandonment. If an appropriator has, in fact, abandoned his right, it would matter not for how long a time he had ceased to use the water, for the moment that the abandonment itself was complete, his rights would cease and determine. Upon the other hand, he may have leased his property, and paid taxes thereon, thus negativing the idea of abandonment, as in this case, and yet may have failed for many years to make any beneficial use of the water he has appropriated. The question presented, therefore, is not one of abandonment, but one of non-user merely, and, as such, involves a construction of section 1411 of the Civil Code. That section, as has been said, makes a cessation of use by the appropriator work a forfeiture of his right, and the question for determination is, 'How long must this non-user continue before the right lapse?'[43]

"Upon this point, the legislature has made no specific

43 The previous cases had answered this question by saying any time that the jury considered unreasonable under the circumstances.

declaration, but, by analogy, we hold that a continuous non-user for five years, will forfeit his right. The right to use the water ceasing at that time, the rights of way for ditches and the like, which are incidental to the primary right of use, would fall also, and the servient tenement would be thus relieved from the servitude.

"In this State five years is the period fixed by law for the ripening of an adverse possession into prescriptive title. Five years is also the period declared by law after which a prescriptive right depending upon enjoyment is lost for non-user; and for analogous reasons we consider it to be a just and proper measure of time for the forfeiture of an appropriator's rights for a failure to use the water for a beneficial purpose.

"Considering the necessity of water in the industrial affairs of this State, it would be a most mischievous perpetuity which would allow one who has made an appropriation of a stream to retain indefinitely, as against other appropriators, a right to the waters therein, while failing to apply the same to some useful or beneficial purpose. Though during the suspension of his use, other persons might temporarily utilize the water unapplied by him, yet no one could afford to make disposition for the employment of the same involving labor or expense of any considerable moment, when liable to be deprived of the element at the pleasure of the appropriator, and after the lapse of any period of time, however great.

"The failure of plaintiffs to make any beneficial use of the water for a period of more than five years next preceding the commencement of the action, as found by the court, results, from what has been said, in a forfeiture of their rights as appropriators."[44]

[44] Compare Waring v. Crow, 11 Cal. 366; Dodge v. Marden, 7 Or. 456. Farmers' etc. Irr. Dist. v. Frank (Neb.), 100 N. W. 286, seems to approve Smith v. Hawkins.

In Integral etc. Co. v. Altoona etc. Co.[45] Smith v. Hawkins was considered, but as less than five years of non-user was shown, it was held unnecessary to pass upon that case.[46]

To the comments we have made upon Smith v. Hawkins, under the question of abandonment, the following may be added: In the circuit court for the ninth circuit (District of Nevada),[47] in a question concerning an appropriator of water, the court uses the following language:

"It is well settled that lapse of time does not of itself constitute an abandonment, and that it is only a circumstance for the jury to consider in determining whether there has been an abandonment. In other words, the question is one of intent. Said the court in Waring v. Crow, 11 Cal. 369, 'The intention alone governs.'[48] In Moon v. Rollins, 36 Cal. 337, it was held that one in possession of land might leave it for a period of five years if he had the intention of returning, and that his mere failure to occupy the land for that period does not necessarily constitute an abandonment."[49]

§ 193a. **Forfeiture Under Irrigation Codes.**—A Utah statute[50] contained the same provision as section 1411 of the California Civil Code, adding that when one "ceases to use the water for a period of seven years, the right

45 75 Fed. 379, 21 C. C. A. 409.

46 Compare Wyo. Rev. Stats. 895.

47 In Valcalda v. Silver etc. Co., 86 Fed. 90, 29 C. C. A. 591.

48 Keane v. Cannovan, 21 Cal. 293, 82 Am. Dec. 738; St. John v. Kidd, 26 Cal. 272.

49 Compare, also, opinion of Knowles, Judge, in Hewett v. Story, 64 Fed. 510, 12 C. C. A. 250, 30 L. R. A. 265, citing Judson v. Malloy, 40 Cal. 299, as also holding that mere non-user, however long, does not constitute an abandonment.

50 Now substantially Laws 1905, c. 108, sec. 53.

ceases; but questions of abandonment shall be questions of fact and shall be determined as other questions of fact." This, more than the California section, might have been construed to create a forfeiture as distinguished from an abandonment. But the court[51] held that it did not, and decided *contra* to Smith v. Hawkins. Though the non-user had continued more than seven years, it was held not to cause a loss of right, because the intent to abandon was lacking.

Smith v. Hawkins is pretty sure to be followed in California. It will place a limit of five years on the right to hold water for future needs in irrigation;[52] an important result of the case. In other States, non-user of water held for future needs has been allowed to go on for ten years or more, without loss of right,[53] in the absence of statute specifying a shorter time in which the actual use must be accomplished.

In Wyoming, the last legislature provided for a loss of right after five years of non-user.[54] Likewise Idaho.[55] In South Dakota, non-user for two years causes loss of right.[56] In Oklahoma, non-user for two years causes loss of right.[57] In New Mexico, non-user for four years causes loss of right.[58]

Such statutes as these will probably be construed in the light of Smith v. Hawkins, as providing for forfeiture, *in invitum*, regardless of intent not to abandon.

51 In Promontory etc. Co. v. Argile (Utah), 79 Pac. 47.
52 See *ante*, Appropriation for Future Needs, secs. 145, 146.
53 *Ante*, secs. 145, 146.
54 Stats. 1905, p. 36.
55 Stats. 1905, p. 27.
56 S. Dak. Stats. 1905, p. 201, c. 132, sec. 45.
57 Stats. 1905, p. 274, c. 21, sec. 28.
58 Stats. 1905, p. 270, sec. 5.

C. ADVERSE USE.

§ 194. **In General.**—By one allowing another to divert the water (in whole or in part[59]) adversely for five years, the right is correspondingly lost by the former and acquired by the latter.[60] A corporation is in this respect on the same footing as a natural person.[61] A landlord may lose his right in this way, if the adverse use is against his tenant.[62] It is said that a grant will be presumed to have been made to the adverse claimant,[63] though this is merely a fiction of the law. It is not a reward of adverse diligence, but a punishment for delay; the law will not look into stale demands. The result is that title passes in either view.[64] The right by adverse use must be specially pleaded.[65] It may itself, in turn, be lost by adverse use later, or in other ways of loss of right.[66]

The question of priority as concerns a right obtained by adverse use has not arisen; but seems a point that may well give difficulty. On the presumed grant theory, the newly acquired right would retain the priority of the original appropriation, as a grant in writing trans-

59 Smith v. Green, 109 Cal. 228, at 233, 41 Pac. 1022; Smith v. Hawkins, 120 Cal. 86, 52 Pac. 139.

60 Civ. Code, 1007; Davis v. Gale, 32 Cal. 26, 91 Am. Dec. 554; Cox v. Clough, 70 Cal. 345, 11 Pac. 732; Alta etc. Co. v. Hancock, 85 Cal. 219, 20 Am. St. Rep. 217, 24 Pac. 645; Gallagher v. Montecito etc. Co., 101 Cal. 242, 35 Pac. 770; Faulkner v. Rondoni, 104 Cal. 140, 37 Pac. 883.

61 Montecito etc. Co. v. Santa Barbara, 144 Cal. 578, 77 Pac. 1113.

62 Heilbron v. Last Chance etc. Ditch Co., 75 Cal. 117, 17 Pac. 65.

63 American etc. Co. v. Bradford, 27 Cal. 360; Turner v. Tuolumne etc. Co., 25 Cal. 397; Yankee Jim etc. Co. v. Crary, 25 Cal. 504, 85 Am. Dec. 145; American Co. v. Bradford, 27 Cal. 360; Faulkner v. Rondoni, 104 Cal. 140, 37 Pac. 883.

64 Alhambra etc. Water Co. v. Richardson, 72 Cal. 598, 14 Pac. 379; Cal. Civ. Code, 1007.

65 Matthews v. Ferrea, 45 Cal. 51; Winter v. Winter, 8 Nev. 129.

66 Los Angeles v. Pomeroy, 125 Cal. 420, 58 Pac. 69.

mits the right without loss of priority.[67] But if that fiction is laid aside it would seem that the adverse use gives a right only from the start of the adverse use, as a new appropriator by actual diversion, as in the case of a parol sale.[68]

The following are the requisites for the acquisition of a right by adverse use.[69]

§ 195. **No Need of Statutory Appropriation.**—Posting a notice is valuable evidence, but it is not necessary to make out a right by adverse use.[70]

§ 196. **Use of the Water for a Beneficial Purpose.**—The adverse claimant must have himself used the water for a beneficial purpose.[71] Adverse use of land does not carry title to a water right appurtenant thereto if there was no specific use made of the water.[72]

§ 197. **Continuous for Five Years.**—Five years is usually the period for all interests in real estate.[73] During that time the use must have been continuous.[74] It is sufficiently continuous if the adverse claimant used the water regularly as his needs required, though this did not necessitate a steady flow.[75]

§ 198. **Hostile Invasion of Right of True Owner.**—There must be an invasion of the right of the true owner un-

67 *Ante*, sec. 121.

68 *Ante*, secs. 84, 123.

69 In general, see 93 Am. St. Rep. 711, note.

70 Alta etc. Co. v. Hancock, 85 Cal. 219.

71 Senior v. Anderson, 130 Cal. 290, at 297, 62 Pac. 563; Alta etc. Co. v. Hancock, 85 Cal. 219, 20 Am. St. Rep. 217, 24 Pac. 645.

72 *Ibid.* See, also, 93 Am. St. Rep. 719, note.

73 Cal. Code Civ. Proc. 318.

74 Cal. Code Civ. Proc. 325.

75 Hesperia etc. Co. v. Rogers, 83 Cal. 10, 17 Am. St. Rep. 202, 23 Pac. 196. See 93 Am. St. Rep. 717, note.

der a claim of right by the adverse claimant.[76] If there is permission, the use, however long continued, cannot ripen into a right.[77] A use under a void deed as though the deed were good is adverse to the grantor, though not adverse to the right of strangers to the deed.[78]

There can hence be no adverse use by lower claimants against those above, since a use below can in no way interfere with the flow above; it is no possible invasion of the right of the upper owner.[79] Nor is the use of a surplus above the appropriator adverse to him, since it leaves the amount to which he is entitled uninvaded.[80] No right by adverse use can hence result from use below, or from use of surplus above.[81]

"A mere scrambling possession of the water or the obtaining of it by force or fraud gives no prescriptive right; nor can this right be acquired if, during the time in which such right is claimed to have accrued, there has been an abundant supply of water in the stream or river for other claimants."[82]

In Alta Land Co. v. Hancock, 85 Cal. 219, 20 Am. St. Rep. 217, 24 Pac. 645, it is said that an adverse use of land does not necessarily carry with it water used thereon, if there is no adverse use of the water. This would seem to be inconsistent with the rule that the

76 American etc. Co. v. Bradford, 27 Cal. 360; Oneto v. Restano, 78 Cal. 374, 20 Pac. 743; Paige v. Rocky Ford etc. Co., 83 Cal. 84, 21 Pac. 1102, 23 Pac. 875.

77 Ball v. Kehl, 95 Cal. 606, 30 Pac. 780.

78 Rose v. Mesmer, 142 Cal. 322, at 332, 75 Pac. 905; Cal. Civ. Code, 323.

79 Bathgate v. Irvine, 126 Cal. 135, 77 Am. St. Rep. 158, 58 Pac. 442; Cave v. Tyler, 133 Cal. 566, 65 Pac. 1089; Beers v. Sharpe, 44 Or. 386, 75 Pac. 717.

80 Fifield v. Spring Valley etc. Works, 130 Cal. 552, 62 Pac. 1054.

81 See, also, 93 Am. St. Rep. 717, note; Talbot v. Butte etc. Co., 29 Mont. 17, 73 Pac. 111; Norman v. Corbley (Mont.), 79 Pac. 1059.

82 Union Mill etc. Co. v. Dangberg, 81 Fed. 73.

water right usually passes as an appurtenance to the land.

If the use is inconsistent with the owner's right, it is adverse, irrespective of the amount of damage, however small that may be; even if there is no money damage at all.[83]

§ 199. **Open and "Not Clam."**—The use must be open and "not clam" or clandestine, hidden, or concealed.[84] This will hence be an important obstacle to claims to percolating water by adverse use.

§ 200. **Chance to Prevent.**—There must be a chance for the true owner to prevent the use by the claimant, either by physical force, or legal proceedings.[85] Hence, another reason why there can be no right by adverse use from use below, or of the surplus above, the appropriator.[86]

As there was no right of action for loss of percolating water under the old rule, no right to it could be acquired by adverse use, under the old rule.[87]

83 Creigton v. Evans, 53 Cal. 55; Moore v. Clear etc. Works, 68 Cal. 146, 8 Pac. 816; Stanford v. Felt, 71 Cal. 249, 16 Pac. 900; Heilbron v. Fowler etc. Canal Co., 75 Cal. 426, 7 Am. St. Rep. 183, 17 Pac. 535; Conkling v. Pacific etc. Co., 87 Cal. 296, 25 Pac. 399; Walker v. Emerson, 89 Cal. 456, 26 Pac. 968; Spargur v. Hurd, 90 Cal. 221, 27 Pac. 198; Mott v. Ewing, 90 Cal. 231, 27 Pac. 194. See *ante*, sec. 167.

84 Montecito etc. Co. v. Santa Barbara, 144 Cal. 578, at 597, 77 Pac. 1113.

85 Hanson v. McCue, 42 Cal. 303, 10 Am. Rep. 299; Montecito etc. v. Santa Barbara, 144 Cal. 578, at 597, 77 Pac. 1113; but see Alhambra etc. Water Co. v. Richardson, 72 Cal. 598, 14 Pac. 379; Fogarty v. Fogarty, 129 Cal. 46, 61 Pac. 570.

86 *Supra*, sec. 198.

87 Hanson v. McCue; 42 Cal. 303, 10 Am. Rep. 299.

§ 201. **Uninterrupted.**—The use must be uninterrupted by the true owner.[88] Mere verbal objection is not an interruption; it must be some act actually causing a stoppage in the adverse use for a reasonable time.[89]

§ 202. **Payment of Taxes.**—Section 325 of the California Code of Civil Procedure requires the claimant to real estate by adverse use to have paid the taxes thereon during the five years. This applies also to water rights, as they are real estate.[90] In construing this rule, the adverse claimant is favored. If no taxes were assessed, the rule is inoperative.[91] The burden of proof that taxes were assessed, and also that they were not paid, is not on the adverse claimant, but on the owner.[92] If the claimant used the water upon other land owned by him, and paid the taxes assessed upon that land generally, that fulfills the requisite, though there was no separate or specific payment of taxes for the water, there having been no separate assessment thereof.[93]

§ 203. **Against the United States.**—There can be no adverse use against the United States, and hence if the title to the water was in the government any part of the five years, no prescriptive right can arise.[94] And

88 American Co. v. Bradford, 27 Cal. 360; Davis v. Gale, 32 Cal. 26, 91 Am. Dec. 554; Cave v. Crafts, 53 Cal. 135; Bree v. Wheeler, 129 Cal. 145, 61 Pac. 782; Montecito etc. Co. v. Santa Barbara, 144 Cal. 578, at 597, 77 Pac. 1113.

89 Cox v. Clough, 70 Cal. 345, 11 Pac. 732.

90 Frederick v. Dickey, 91 Cal. 358, 27 Pac. 742.

91 Heilbron v. Last Chance Water etc. Co., 75 Cal. 117, 17 Pac. 65; Oneto v. Restano, 78 Cal. 374, 20 Pac. 743; Hesperia etc. Co. v. Rogers, 83 Cal. 10, 17 Am. St. Rep. 202, 23 Pac. 196.

92 *Ibid.*

93 Conradt v. Hill, 79 Cal. 587, 21 Pac. 1099.

94 Mathews v. Ferrea, 45 Cal. 51; Wilkins v. McCue, 46 Cal. 656; Jatunn v. Smith, 95 Cal. 154, 30 Pac. 200; Smith v. Hawkins, 110 Cal. 122, 42 Pac. 453; Vansickle v. Haines, 7 Nev. 249.

also, consequently, the acquisition of a right by appropriation and one by adverse use stand on entirely different footings.[95]

§ 204. Conclusion.—"Sections 322 and 324 of the Code of Civil Procedure require an actual occupation, that this occupation be open and notorious, and that it be in hostility to plaintiff's title, and under a claim of title exclusive of any other right, and that the occupation shall have been continuous and uninterrupted for five years. Section 325 of the same code makes the additional requirement of the payment of all levied and assessed taxes. In Unger v. Mooney, 63 Cal. 595, 49 Am. Rep. 100, these essential elements for the acquisition of a title by prescription are specifically set forth. It is true that in Cave v. Crafts, 53 Cal. 135, it is said that the adverse use must be peaceable. But that means no more, as the opinion itself explains, quoting Wood on Nuisances, than that it must be uninterrupted. Says Wood: 'The use must also be open and as of right, and also peaceable, for if there is any act done by other owners that operates as an interruption, however slight, it prevents the acquisition of the right by such use.' If the possession has been uninterrupted, of necessity it has been peaceable. If it had been interrupted, of necessity it has not been peaceable. The words are therefore interchangeable and synonymous in the pleading of prescriptive title. (American Co. v. Bradford, 27 Cal. 360; Chauvet v. Hill, 93 Cal. 407, 28 Pac. 1066; Smith v. Hawkins, 110 Cal. 122, 42 Pac. 453.)" The above is quoted from Montecito etc. Co. v. Santa Barbara, 144 Cal. 578, 77 Pac. 1113, as a late summary of the law of adverse use concerning water rights.

"From these observations it will be seen that it is

95 *Ante*, sec. 62.

difficult to obtain a prescriptive right to the use of water under our law as it now stands." This remark was made by the Idaho court[96] after setting forth requirements similar to those of California as given above; and the result in the many California cases where a right by adverse use was contended for, substantiates this conclusion.

D. ESTOPPEL.

§ 205. We have already considered the question of loss by estoppel as applying to artificial watercourses, finding that there is no estoppel arising from merely standing by and allowing the use by others below of the waste discharged, from ditches, etc.[97] As concerns natural streams the principle, so far as regards estoppel merely, is the same. Lower or upper rights in the natural stream may be acquired by appropriation, or upper rights by adverse use, but regarding estoppel strictly—that is, standing by and allowing the use of the water by others—that will usually no more estop the true owner from interfering later than in the case of artificial watercourses. If one has no right by appropriation or adverse use, the mere silence of others gives him none by estoppel.

The rule is laid down in Lux v. Haggin,[98] as follows:

"Parke v. Kilham, 8 Cal. 77, 68 Am. Dec. 310, was an action at law to recover certain water and damages, tried by a jury, who rendered a general verdict. The court held that an instruction in the following terms was 'substantially correct': That if those from and through whom the plaintiffs claim had the prior right to the waters, and they stood by and saw those from

96 In Hall v. Blackman, 8 Idaho, 272, 68 Pac. 19.

97 *Ante*, secs. 132, 150, 191.

98 69 Cal. 255, at 278, 10 Pac. 674.

whom the defendant derives his title to the ditch, and the right to the waters of the creek, appropriate the water of the creek, at great expenditure of money and labor, under the mistaken idea that the defendant's vendors were obtaining the first appropriation, and did not inform them of the mistake, they, plaintiff's vendors, and the plaintiffs who claim under them, are estopped from setting up their prior right at this time.

"In the light of the subsequent decisions, it can scarcely be claimed that the facts recited in the instruction constituted an equitable estoppel which could be relied on as a defense at law. It may be that the defendant had the better right. In fact, the defendant's grantors seem to have appropriated the water before the plaintiff's grantors even 'located' the mining claim. It does not appear that the plaintiff's predecessors ever took actual possession of the mining claim; and even if the location of the claim preceded the defendant's appropriation, it does not appear that the manner of the location was such as that defendant's grantors were bound to take notice of it. But, whatever, the facts, we cannot assent to the proposition—apparently recognized by the court—that the mere silence of plaintiff's grantors, disconnected from other circumstances in evidence, created an estoppel at law."[99]

E. EMINENT DOMAIN.

§ 206. Private rights of ownership must give way to public benefit, and may be taken for public use. In this respect the law is the same concerning waters as concerning all other property. The following may, however, be mentioned.

[99] Accord cases cited in 93 Am. St. Rep. 717, note. Bolter v. Garrett, 44 Or. 304, 75 Pac. 142. See *ante*, sec. 132 et seq.

The California constitution[100] provides:

"Private property shall not be taken or damaged for public use without just compensation having been first made to, or paid into court, for the owner, and no right of way shall be appropriated to the use of any corporation other than municipal until full compensation therefor be first made in money or ascertained and paid into court for the owner, irrespective of any benefit from any improvement proposed by such corporation, which compensation shall be ascertained by a jury, unless a jury be waived, as in other civil cases in a court of record, as shall be prescribed by law."

Under this constitutional provision, the legislature has provided[101] for various cases for eminent domain proceedings, among them the following: "Canals, ditches, dams, pondings, flumes, aqueducts and pipes, for irrigation, public transportation, supplying mines and farming neighborhoods with water, and draining and reclaiming lands," etc.

All acts of the legislature are, however, subject to the constitutional limitation above quoted and to a similar provision in the constitution of the United States (Amd. XIII). The statutes passed by the legislature so far as they authorize the taking of water rights for uses that are not public uses, are unconstitutional.[102]

The California court has upheld irrigation as a public use. The provision[103] allowing water to be taken for the supply of farming neighborhoods was upheld.[104]

100 Article 1, section 14.

101 In Cal. Code Civ. Proc., sec. 1238.

102 See Lux v. Haggin, 69 Cal. 255, 10 Pac. 674; Merrill v. Southside etc. Co., 112 Cal. 426, 44 Pac. 720; Los Angeles v. Pomeroy, 124 Cal. 597, 57 Pac. 585.

103 In Cal. Code Civ. Proc., sec. 1238.

104 In Lux v. Haggin, 69 Cal. 255, 10 Pac. 674; and in Aliso etc. Co. v. Baker, 95 Cal. 268, 30 Pac. 537; Lindsay etc. Co. v. Mehrtens,

What constitutes a farming neighborhood is discussed in the cases just cited. Water can be taken for the use of irrigation districts.[105]

The taking for a public water supply under Code of Civil Procedure, 1238, was upheld.[106]

On the other hand, mining is not, in California, a public use, and the above statute authorizing water to be taken to run a group of mines is to this extent unconstitutional.[107] The difference between mining and irrigation in this respect emphasizes the fact, shown throughout this whole subject, that mining is no longer the paramount industry in California.

It was formerly held that the presence of percolating water was not an element that could be considered in estimating the value of property taken on eminent domain.[108] But under the new rule concerning percolating waters, they are recognized as having not only value, but a great value.

97 Cal. 670, 32 Pac. 802; Fallbrook Irr. Dist. v. Bradley, 164 U. S. 112, 17 Sup. Ct. Rep. 56, 41 L. ed. 369.

105 *Ibid.*, and Cal. Stats. 1897, p. 254. See cases cited *ante*, sec. 21.

106 In McCrary v. Baudry, 67 Cal. 120, 7 Pac. 264; Santa Cruz v. Enright, 95 Cal. 105, 30 Pac. 197. See Cal. Const., art. XIV, sec. 1.

107 Lorenz v. Jacob, 63 Cal. 73, and Consolidated etc. Co. v. Central Pac. Ry., 51 Cal. 269.

108 Los Angeles v. Pomeroy, 124 Cal. 597, 57 Pac. 585.

CHAPTER XIII.

THE COMMON LAW OF RIPARIAN RIGHTS.

§ 207. Appropriation and the common law.
§ 208. Riparian rights under the California doctrine.

A. NATURE OF RIPARIAN RIGHT.

§ 209. Part and parcel of riparian land—Not an easement.
§ 210. Usufructuary solely.
§ 211. May be sold or be the subject of contract.

B. WHAT SUBJECT THERETO.

§ 212. In general.
§ 213. Underground streams.
§ 214. Percolating water under recent decisions.

C. LIMITATIONS ON USE OF WATER.

§ 215. In general.
§ 216. Natural uses.
§ 217. Artificial uses.
§ 218. Apportioning.
§ 219. Cannot be used on non-riparian land.
§ 220. Return of surplus.
§ 221. Manner of use.

D. PROTECTION OF THE RIGHT.

§ 222. In general.
§ 223. Diminution acceleration, pollution.
§ 224. Form of remedy.
§ 225. Pleading.

E. LOSS OF RIGHT.

§ 226. No abandonment.
§ 227. Adverse use.
§ 228. Eminent domain.
§ 229. By natural causes.

F. DISTINCTION FROM APPROPRIATION.

§ 230. Distinctions recapitulated.
§ 231. Change of attitude toward appropriation in California.

§ 207. **Appropriation and the Common Law.**—It was at one time contended that appropriation of waters was a common-law doctrine, and passages in Blackstone were among the authorities relied upon.[1] But that contention has long since been refuted. The matter was examined in Lux v. Haggin, with the following result:[2]

"Goddard, in his Law of Easements, page 251, declares: 'That all riparian owners of natural streams have a riparian right to the use of water as it flows past their lands, as long as they do not interfere with the natural rights of other riparian owners, and to sue for disturbance is now an established doctrine of the law.' He adds: 'The doctrine was not established until comparatively modern times,' etc. He says, after referring to some of the earlier decisions, that the (apparent) theory of appropriation was much modified by various decisions 'as the nature of riparian rights was brought more fully under consideration'; citing in this connection Mason v. Hill,[2a] and Cueker v. Cowper, 5 Tyrw. 103. He concludes: 'Appropriation of the water of flowing streams has thus gradually fallen from being considered the means of acquiring important rights to being deemed of no importance whatever.'

"Mr. Angell, however, cites a case of as early a date as 32 Edward III, where an assize of nuisance was brought by A against B, for that B had made a trench from a river, and drawn away thereby a part of the water and stream another way from that in which it did formerly use to run; and the assize passed for the plaintiff; and it was adjudged that the water should be removed to its ancient channel at the cost of the defend-

1 *Ante*, secs. 7, 38.

2 69 Cal. 255, at 389, 10 Pac. 674.

2a 3 Barn. & Adol. 304.

ant. (Angell on Watercourses, 93. See also Yearbook, 14 Henry VIII, 31, referred to by Angell.)

"In Chasemore v. Richards, 7 H. L. Cas. 384, Lord Winsleydale declares: 'We may consider, therefore that this proposition is indisputable, that the right of the proprietor to the enjoyment of a watercourse is a natural right, and is not acquired by occupation,' etc.

"In examining the numerous cases which establish that the doctrine of 'appropriation' is not the doctrine of the common law, we meet an embarrassment of abundance."

The contention that the doctrine of appropriation was recognized by the common law is disposed of by Judge Cooley[3] in the following words: " . . . . We may dismiss from the mind the fact that the plaintiff had first put the waters of the stream to practical use, since that fact gave him no superiority in right over the defendant. The settled doctrine now is that priority of appropriation gives to one proprietor no superior right to that of the others, unless it has been continued for a period of time, and under such circumstances, as would be requisite to establish rights by prescription."[4]

§ 208. **Riparian Rights Under the California Doctrine.**— Because of the co-ordinate position of the system of appropriation and that of riparian rights, under the California doctrine, as in force in California and in other States, as elsewhere discussed[5] some words should be added regarding the latter system.

3 In Dumont v. Kellog, 29 Mich. 420, 18 Am. Rep. 102.

4 Citing Platt v. Johnson, 15 Johns. 213, 8 Am. Dec. 233; Tyler v. Wilkinson, 4 Mason, 397, Fed. Cas. No. 14,312; Gilman v. Tilton, 5 N. H. 231; Pugh v. Wheeler, 19 N. C. (2 Dev. & B.) 50; Hartzall v. Sill, 12 Pa. St. 248; Gould v. Boston Dock Co., 13 Gray, 442; Wood v. Edes, 2 Allen, 578; Parker v. Hotchkiss, 25 Conn. 321; Heath v. Williams, 25 Me. 209, 43 Am. Dec. 265; Snow v. Parsons, 28 Vt. 463, 69 Am. Dec. 723; Bliss v. Kennedy, 43 Ill. 67; Cowles v. Kidder, 24 N. H. 378, 57 Am. Dec. 287.

5 *Ante*, secs. 18, 23, 33.

The two systems come in contact in many places, such as the right of prior claimants based on one system to be protected against later claims based on the other; the right to appropriate the surplus over what is needed by the riparian proprietor;[6] the right of the riparian proprietor to riparian rights in the surplus over prior appropriations.[7]

The field is an old and extensive one, on which there is far more decided law than on the law of appropriation. Only the general principles can be here stated in order to contrast them with the law of appropriation. The statement is confined to some of the decisions of supreme court of California. California has developed nothing peculiar on the substance of riparian rights.[8] The general mass of the common-law cases of other jurisdictions are freely cited in the California courts. There are no innovations. In some cases it is said that allowing irrigation as a reasonable use by a riparian owner was peculiar to the West,[9] but in Lux v. Haggin[10]

6 *Supra*, sec. 33 et seq., and Edgar v. Stevenson, 70 Cal. 285, 11 Pac. 704; Modoc etc. Co. v. Booth, 102 Cal. 151, 36 Pac. 431.

7 *Supra*, sec. 33 et seq.; Barrows v. Fox, 98 Cal. 63, 32 Pac. 811; Faulkner v. Rondoni, 104 Cal. 140, 37 Pac. 883.

8 Unless the rule of Katz v. Walkinshaw, 141 Cal. 116, 99 Am. St. Rep. 35, 70 Pac. 663, 74 Pac. 766, applying (apparently) those rules to underground water.

9 "But in some of the Western and Southwestern States and Territories, where the year is divided into one wet and one dry season, and irrigation is necessary to successful cultivation of the soil, the doctrine of riparian ownership has, by judicial decision, been modified, or, rather, enlarged, so as to include the reasonable use of natural water for irrigating the riparian land, although such use may appreciably diminish the flow down to the lower riparian proprietor. And this must be taken to be the established rule in California, at least, where irrigation is thus necessary." Harris v. Harrison, 93 Cal. 676, 29 Pac. 325. Compare, also, Lobdell v. Simpson, 2 Nev. 274, 90 Am. Dec. 537.

10 69 Cal. 255, at 398 et seq., 10 Pac. 674.

the question is thoroughly examined and it is shown that there is nothing in this peculiar to the West. Lux v. Haggin, 69 Cal. 255, 10 Pac. 674, is the leading California case upon the whole subject of riparian rights.[11]

A. NATURE OF RIPARIAN RIGHT.

§ 209. Part and Parcel of Riparian Land—Not an Easement.—Unlike an appropriation, riparian rights need no act of the owner to acquire them; they attach to the land bordering on the stream of their own accord. The right thereto is said to be a natural right.[12] In ancient times when the law was being shaped, the use for drinking purposes was in mind, and to deprive the land owner of that was not to be thought of. It is a natural right similar to the right to support from land adjoining, a natural attribute of the land itself in its natural state. It is part and parcel of the land, acquired by virtue of ownership of the land, without any special formalities of any kind.[13] It passes *ipso facto* with the land on a sale, as part and parcel thereof.[14] A deed of land with warranty includes, without more, a warranty of riparian rights, but does not necessarily in-

11 See, also, the Nevada case of Vansickle v. Haines, 7 Nev. 249.

12 The designation as a natural right is fixed in the law. That such things as natural rights, such as the right to breathe the air, or to drink water, or to enjoy personal liberty, exist because of the divine law or the law of nature, is a doctrine of the philosophers of the eighteenth century; and we find natural rights one of the fundamental divisions of rights in Blackstone's Commentaries. The doctrine of natural or absolute rights is hardly in favor to-day. However, as a natural attribute of the land, a natural part thereof, the designation of the riparian right as a natural right is not unexpressive, though that is not strictly its original meaning.

13 Lux v. Haggin, 69 Cal. 255, at 390, 10 Pac. 674; Bathgate v. Irvine, 126 Cal. 135, 77 Am. St. Rep. 158, 58 Pac. 442.

14 Lux v. Haggin, 69 Cal. 255, at 430, 10 Pac. 674.

clude a warranty of a right by appropriation.[15] It is not an easement or appurtenance.[16]

§ 210. **It is Usufructuary Solely.**—There is no ownership of the water itself under the doctrine of riparian rights, any more than under the doctrine of appropriation. The right is to a use and flow merely, a right to use the water as naturally following ownership of the land,[17] just as riparian owners have a right to fish in the stream, but do not own the fish swimming there.[18] The riparian owner usually owns the bed to the middle of the stream, but the right is independent of that fact and exists also in navigable streams, where the title to the bed of the stream is in the State.[19]

§ 211. **May be Sold or be the Subject of Contract.**—A riparian owner may grant the water to one person and the land to another, which grant will be binding between the parties,[20] or may retain the land and grant away the water to another.[21] Other riparian proprietors may, it is true, complain if their rights are infringed by this,[22] but if all join in it or none are injured in their use of the water, it is perfectly valid.[23] The riparian right

15 Dalton v. Bowker, 8 Nev. 190.

16 Lux v. Haggin, 69 Cal. 255, at 293, 10 Pac. 674; Vernon etc. Co. v. Los Angeles, 106 Cal. 237, 39 Pac. 762; Pomeroy on Riparian Rights, sec. 9.

17 Lux v. Haggin, 69 Cal. 255, 10 Pac. 674.

18 People v. Truckee etc. Co., 116 Cal. 397, 58 Am. St. Rep. 183, 48 Pac. 374, 39 L. R. A. 381.

19 See *ante*, sec. 66, and Lux v. Haggin, 69 Cal. 255, at 391, 10 Pac. 674.

20 Painter v. Pasadena etc. Co., 91 Cal. 74, 27 Pac. 539.

21 Rose v. Mesmer, 142 Cal. 322, 75 Pac. 905.

22 Gould v. Stafford, 91 Cal. 146, 27 Pac. 543.

23 Churchill v. Baumann, 104 Cal. 369, 36 Pac. 93, 38 Pac. 43; Fuller v. Azusa etc. Co., 138 Cal. 204, 71 Pac. 98; Rose v. Mesmer, 142 Cal. 322, 75 Pac. 905.

may likewise be reserved in a conveyance of the land and separated from the land in that way.[24]

As a result of this freedom of contract, where all the riparian rights on a stream are dealt with together in one contract, a right similar in result to an appropriation may arise, since all who could complain have contracted away their rights. A severance of riparian rights by a sole riparian proprietor hence is a close counterpart of an appropriation. An appropriation is, on the other hand, a grant from the United States so far as it is a riparian proprietor.[25]

B. WHAT SUBJECT THERETO.

§ 212. **In General.**—Riparian rights exist in streams and ponds and lakes.[26] What constitutes a watercourse depends on the same principles as those set forth under the law of appropriation.[27]

§ 213. **Underground Streams.**—Probably the landowner has the rights of a riparian owner in streams flowing in a defined course under his ground.[28] The point was left open in Hale v. McLea, 53 Cal. 578, but the general principle is established that underground streams are treated on the same principles as surface streams.[29]

§ 214. **Percolating Water Under Recent Decisions.**—We have already discussed the new rule of percolating water so far as it directly concerns appropriation. It

24 Walker v. Lillingston, 137 Cal. 401, 70 Pac. 282.

25 *Ante*, sec. 24.

26 Lux v. Haggin, 69 Cal. 255, 10 Pac. 674.

27 *Ante*, sec. 65.

28 Pomeroy on Riparian Rights, sec. 63; Yarwood v. West Los Angeles etc. Co., 132 Cal. 204, 64 Pac. 275; and *ante*, sec. 72.

29 *Ante*, sec. 73. The point was mentioned in Katz v. Walkinshaw, 141 Cal. 116, at 140 and 149, 99 Am. St. Rep. 35, 70 Pac. 663, 74 Pac. 766.

would be going too far afield to discuss the new law in other aspects. Reference must be made to Katz v. Walkinshaw, 141 Cal. 116, 99 Am. St. Rep. 35, 70 Pac. 663, 74 Pac. 766, and the following cases since decided on the same principle: McClintock v. Hudson, 141 Cal. 275, 74 Pac. 849; Rose v. Mesmer, 142 Cal. 322, 75 Pac. 905; Cohen v. La Canada etc. Co., 142 Cal. 437, 76 Pac. 47; Santa Barbara v. Gould, 143 Cal. 421, 77 Pac. 151; Montecito etc. Co. v. Santa Barbara, 144 Cal. 578, 77 Pac. 1113.

In a general way, it may be said that all landowners have a natural right, in the sense that riparian rights are natural rights, to a reasonable use, on their own land, of the water percolating under their land and not appropriated by others as elsewhere discussed.[30] It is reasonable to dig wells to get at it. It is not reasonable to take so much as will interfere with the use by other landowners, in order to use the water oneself. How far the right is limited to cases of an underground reservoir of saturation, resembling subterranean ponds or lakes, is not settled.[31]

This landowner's right to percolating water closely resembles riparian rights in its characteristics. As a matter of theory, however, Mr. Justice Temple's view in Katz v. Walkinshaw is otherwise. Following the old law as much as possible, he believed the landowner has property in the water itself and not a mere usufructuary right; that the limitation on use was a qualification of ownership, whereas before the qualification had been absent; but that actual ownership of the water remained, and not a mere use and flow.

30 *Ante*, sec. 78.

31 *Ante*, sec. 79.

C. LIMITATIONS ON USE OF WATER.

§ 215. **In General.**—The characteristic feature of riparian rights is that the purpose, amount and manner of use is limited in all directions so as to be within the reasonable needs of the land to which the right attaches.

Reasonable uses include two great classes, natural uses and artificial uses.[32]

§ 216. **Natural Uses.**—Natural uses are those arising out of the necessities of life on the riparian land, such as household use, drinking, watering domestic animals. For these purposes the riparian owner may take the whole stream if necessary, leaving none to go down to lower riparian proprietors or lower subsequent appropriators.[33]

"It appears to be law that where all the water of a stream is needed for domestic purposes and for watering cattle, and is thus consumed by one proprietor, the law allows such use."[34]

§ 217. **Artificial Uses.**—Artificial uses are all those that do not minister directly to the necessities of life upon the land; such as uses for the purpose of improvement, trade or profit. This includes diversion for irrigation, the running of machinery, etc.[35] It includes

32 Wiggins v. Muscupiabe etc. Co., 113 Cal. 182, 54 Am. St. Rep. 337, 45 Pac. 160, 32 L. R. A. 667; Lux v. Haggin, 69 Cal. 255, at 408, 10 Pac. 674.

33 Lux v. Haggin, 69 Cal. 255, at 395 and 407, 10 Pac. 674; Stanford v. Felt, 71 Cal. 249, 16 Pac. 900; Gould v. Stafford, 77 Cal. 66, 18 Pac. 879; Smith v. Corbit, 116 Cal. 587, 48 Pac. 725; Wiggins v. Muscupiabe etc. Co., 113 Cal. 182, 54 Am. St. Rep. 337, 45 Pac. 160, 32 L. R. A. 667; Pomeroy on Riparian Rights, secs. 129, 134; Alta etc. Co. v. Hancock, 85 Cal. 219, 20 Am. St. Rep. 217, 24 Pac. 645; Chauvet v. Hill, 93 Cal. 407, 28 Pac. 1066.

34 Stanford v. Felt, 71 Cal. 249, at 251, 16 Pac. 900.

35 Lux v. Haggin, 69 Cal. 255, 10 Pac. 674.

the watering of large bands of cattle, which is not within the natural uses.[36] For these uses the riparian owner can never take all to the exclusion of others.[37] He can take only what is reasonable, with due regard to the uses of others on the same stream.[38] What is a reasonable use for artificial purposes is a question of fact to be decided in each case.[39] The decision must be made "reference being had to the use required by the others."[40]

"Where two persons own land along the line of a watercourse, the measure of their rights is not necessarily controlled solely by the length of their respective frontages on the stream. Many other things may enter into the question. One may have a tract of land of such character that but little use could be made of the water upon it, while the land of the other may all be so situated that it could be irrigated with profit and advantage. In Harris v. Harrison, 93 Cal. 681,[40a] it is said: 'In such a case, the length of the stream, the volume of water in it, the extent of each ownership along the banks, the character of the soil owned by each contestant, the area sought to be irrigated by each—all these, and many other considerations, must enter into the solution of the problem.' And the general rule is there stated to be, in cases where there is not water

36 Lux v. Haggin, 69 Cal. 255, at 407, 10 Pac. 674. See 79 Am. Dec. 642, note.

37 Learned v. Tangeman, 65 Cal. 334, 4 Pac. 191; Gould v. Stafford, 77 Cal. 66, 18 Pac. 879; Alta etc. Co. v. Hancock, 85 Cal. 219, 20 Am. St. Rep. 217, 24 Pac. 645; Harris v. Harrison, 93 Cal. 676, 29 Pac. 325.

38 *Ibid.*: and Lux v. Haggin, 69 Cal. 255, at 394, 397, 10 Pac. 674; Stanford v. Felt, 71 Cal. 249, 16 Pac. 900; Heilbron v. Land and Water Co., 80 Cal. 189, 22 Pac. 62.

39 *Ibid.*

40 Lux v. Haggin, 69 Cal. 255, at 311, 10 Pac. 674.

40a 29 Pac. 325.

enough to supply the wants of both, that each owner has the right to the reasonable use of the water, taking into consideration the rights and necessities of the other."[41]

"Under the rules of the common law, the riparian proprietors would all have the right to a reasonable use of the waters of a stream running through their respective lands for the purpose of irrigation. It is declared in all the authorities upon this subject that it is impossible to lay down any precise rule which will be applicable to all cases. The question must be determined in each case with reference to the size of the stream, the velocity of the water, the character of the soil, the number of proprietors, the amount of water needed to irrigate the lands per acre, and a variety of other circumstances and conditions surrounding each particular case; the true test in all cases being, whether the use is of such a character as to materially affect the equally beneficial use of the waters of the stream by the other proprietors."[42]

§ 218. **Apportioning.**—If the water is not enough for continual use by all, no one of the owners has a right to deprive the others of it on that account for any of the artificial uses; unlike appropriations the riparian rights of all owners through whose land the stream flows are equal in this. A court of equity will, in such a case, apportion the water so that each can use all for a time or assign to each the continual use of his share only of what there is.[43] It is said that this will be done

41 Southern Cal. etc. Co. v. Wilshire, 144 Cal. 68, at 71, 77 Pac. 767. See, also, Gutierrez v. Wege, 145 Cal. 730, 79 Pac. 449.

42 Jones v. Adams, 19 Nev. 78, 3 Am. St. Rep. 788, 6 Pac. 442.

43 Harris v. Harrison, 93 Cal. 676, 29 Pac. 325; Wiggins v. Muscupiabe etc. Co., 113 Cal. 182, 54 Am. St. Rep. 337, 45 Pac. 160, 32 L. R. A. 667; Smith v. Corbit, 116 Cal. 587, 48 Pac. 725.

with percolating waters as well as other kinds.[44] In Wiggins v. Muscupiabe etc. Co.[44a] the court says: "Whenever it should appear from the circumstances of the case that the only method by which either proprietor could have a reasonable use of the stream would be to allow to each its full flow for a reasonable time, the only equitable adjudgment of their rights would be to thus apportion the flow. Whether this apportionment should be for alternate weeks or alternate days, or for a specific portion of each day, must be determined by the facts of each case. . . . ."[45]

§ 219. **Cannot be Used on Non-riparian Lands.**—The use is not only limited to a reasonable amount in developing the land, but it must be the riparian land to which the right attaches that the water is used for; not for distant or non-riparian lands.[46] Water cannot, under the doctrine of riparian ownership, be used to irrigate non-riparian land.[47] What constitutes riparian land is a question of fact in each case.[48] The ownership or legal title to the land is not the test,[49] even if contiguous to riparian land owned by the same claimant;[50] and con-

44 Katz v. Walkinshaw, 141 Cal., at 136, 99 Am. St. Rep. 35, 70 Pac. 663, 74 Pac. 766. See Glasell v. Verdugo, 108 Cal. 503, 41 Pac. 403.

44a 113 Cal. 182, at 193, 54 Am. St. Rep. 337, 45 Pac. 160, 32 L. R. A. 667.

45 Accord Gutierrez v. Wege, 145 Cal. 730, 79 Pac. 449.

46 Gould v. Eaton, 117 Cal. 539, 49 Pac. 577, 38 L. R. A. 181; Pomeroy on Riparian Rights, sec. 132.

47 Gould v. Stafford, 77 Cal. 66, 18 Pac. 879.

48 Ventura etc. Co. v. Meiners, 136 Cal. 284, 89 Am. St. Rep. 128, 68 Pac. 818.

49 Bathgate v. Irvine, 126 Cal. 135, 77 Am. St. Rep. 158, 58 Pac. 442.

50 Boehmer v. Big Rock etc. Co., 117 Cal. 19, 48 Pac. 908; Gould v. Stafford, 77 Cal. 66, 18 Pac. 879; but see Alta etc. Co. v. Hancock, 85 Cal. 219, 20 Am. St. Rep. 217, 24 Pac. 635, *semble contra.*

sequently water cannot be taken to irrigate distant lands merely because the claimant also owns riparian land.[51] It is certain that land beyond a watershed whence the water could not flow back to the original stream is non-riparian, and no use taking the water beyond a watershed is sanctioned by the law of riparian rights.[52] This applies to natural uses with the same force as to artificial uses.[53]

§ 220. **Return of Surplus.**—While a riparian owner may divert the water within the above limitations, the surplus must in any case be returned to the stream, and must be returned above the upper line of the land of lower claimants.[54] The manner in which it is returned is immaterial.[55]

§ 221. **Manner of Use.**—Reasonableness is the test here as in other limitations on riparian use. There must be no waste.[56] The method of taking the water is immaterial.[57] It is no objection to pumps that the water is raised to a level to which it would not otherwise flow, so long as it is properly used at that level.[58]

51 *Ibid.*

52 Chauvet v. Hill, 93 Cal. 407, 28 Pac. 1066; Silver Creek etc. Co. v. Hayes, 113 Cal. 142, 45 Pac. 191; Bathgate v. Irvine, 126 Cal. 136, 77 Am. St. Rep. 158, 58 Pac. 442; Southern California etc. Co. v. Wilshire, 144 Cal. 68, 77 Pac. 767.

53 Bathgate v. Irvine, 126 Cal. 135, 77 Am. St. Rep. 158, 58 Pac. 442.

54 Bathgate v. Irvine, 126 Cal. 135, 77 Am. St. Rep. 158, 58 Pac. 442.

55 Gould v. Eaton, 117 Cal. 539, 49 Pac. 577, 38 L. R. A. 181.

56 *Ante*, secs. 50, 127.

57 *Ante*, secs. 125, 126.

58 Charnock v. Higuerra, 111 Cal. 473, 51 Am. St. Rep. 195, 44 Pac. 171, 32 L. R. A. 190.

D. PROTECTION OF THE RIGHT.

§ 222. **In General.**—As pointed out under the discussion of protection of a right of appropriation, the test of wrongfulness in riparian rights is whether the use complained of is unreasonable, giving as much regard to the one owner as to the other, their rights being equal, as contrasted with the exclusive right obtained by appropriation, into which the question of reasonableness along these lines does not enter.

§ 223. **Diminution, Acceleration, Pollution.**—Here, as elsewhere, the test is whether the act complained of is a reasonable one, reference being had to the use required by others, and all on the stream being given equal consideration. To cut trees and allow them to fall into a stream and interrupt it, or to decay there and pollute it, is not within the reasonable uses allowed a riparian owner, and he will be enjoined.[59] A lower riparian owner may get an injunction against city sewage.[60] For a discussion of the question in detail, reference should be made to text-books on riparian rights.

§ 224. **Form of Remedy.**—The requisites for injunctions and other actions will be found similar to those discussed *ante*.[61] There are the following differences, however:

Any unreasonable use by another is actionable immediately without damage, even though the plaintiff is not using the water himself.[62] This is because the

59 Fisher v. Feige, 137 Cal. 39, 92 Am. St. Rep. 77, 69 Pac. 618, 59 L. R. A. 333.

60 Peterson v. Santa Rosa, 119 Cal. 387, 51 Pac. 557.

61 See. 67. See Lux v. Haggin, 69 Cal. 255, 10 Pac. 674.

62 Anaheim etc. Co. v. Semi-Tropic etc. Co., 64 Cal. 185, 30 Pac. 623; Stanford v. Felt, 71 Cal. 249, 16 Pac. 900; Heilbron v. Land Co.,

riparian right is part and parcel of the land, not depending on actual use. On the other hand, an appropriation depends on beneficial use, and no action will lie for use by others when the appropriator is not himself using the water.[63] In Katz v. Walkinshaw,[63a] there is a remark contra to this as to percolating water, saying that the landowner will have no right to restrain an unreasonable use thereof by others if not using it himself; suggesting that he could have a decree quieting title to use it whenever he chooses.

A reversioner may sue.[64]

§ **225. Pleading.**—The riparian right must be specifically alleged. It is not enough merely to allege ownership of the land,[65] or merely to allege that the stream passes through your land.[66] A count alleging a right as appropriator will not support a judgment as riparian owner.[67]

E. LOSS OF RIGHT.

§ **226. No Abandonment.**—Riparian rights cannot be lost by abandonment. In this is seen an essential difference between riparian rights and appropriations. The latter depend on continued beneficial use and are conditional; the former depend on no such condition,

80 Cal. 189, 22 Pac. 62; Last Chance etc. Co. v. Heilbron, 86 Cal. 1, 26 Pac. 523; Modoc etc. Co. v. Booth, 102 Cal. 151, 36 Pac. 431; Vernon etc. Co. v. Los Angeles, 106 Cal. 237, at 256, 39 Pac. 762; Gould v. Eaton, 117 Cal. 539, 49 Pac. 577, 38 L. R. A. 181; Bathgate v. Irvine, 126 Cal. 136, 77 Am. St. Rep. 158, 58 Pac. 442; Southern California etc. Co. v. Wilshire, 144 Cal. 73, 77 Pac. 767.

63 *Ante*, sec. 30; Pomeroy on Riparian Rights, sec. 7; California etc. Co. v. Enterprise etc. Co. (C. C. S. Dist. Cal.), 127 Fed. 741.

63a 141 Cal. 116, at 136, 99 Am. St. Rep. 35, 70 Pac. 663, 74 Pac. 766.

64 Gould v. Stafford, 91 Cal. 146, 27 Pac. 543.

65 Riverside etc. Co. v. Gage, 89 Cal. 410, 26 Pac. 889.

66 Lobdell v. Simpson, 2 Nev. 274, 90 Am. Dec. 537.

67 *Supra*, sec. 170.

but are absolutely attached to the land as part thereof, and can no more be lost by abandonment than can the trees growing there. The appropriation arises from a special conditional grant from the government, but the riparian right arises from ownership of the land. Riparian rights remain though the water is put to no use at all.[68] And even if a later comer below makes use of the water, he cannot complain when the riparian owner starts to use it later.[69]

§ 227. **Adverse Use.**—Riparian rights may be lost by adverse use; and this claim is the favorite last resort of claimants to the use of water; it will be found discussed in innumerable cases. In general, the requisites are the same as those elsewhere discussed.[70]

The distinction between upper and lower use must be kept in mind. A lower use, since it in no way interferes with the natural flow above, is no invasion of a right above. No action would lie, and so no prescriptive right nor estoppel can arise below stream against an upper riparian owner.[71] A notice of appropriation by a lower claimant is hence immaterial.[72] But an unreasonable use above will start the running of a prescription, as it is actionable immediately.[73] It must, however, be unreasonable; a use of the surplus above is

68 Hargrave v. Cook, 108 Cal. 72, 41 Pac. 18, 30 L. R. A. 390.

69 Bathgate v. Irvine, 126 Cal. 136, 77 Am. St. Rep. 158, 58 Pac. 442, and cases *supra*, sec. 224.

70 Sec. 194 et seq. See Gallagher v. Montecito etc. Co., 101 Cal. 242, 35 Pac. 770; Bathgate etc. v. Irvine, 126 Cal. 135, 77 Am. St. Rep. 158, 58 Pac. 442.

71 Bathgate v. Irvine, 126 Cal. 135, 77 Am. St. Rep. 158, 58 Pac. 442; Cave v. Tyler, 133 Cal. 566, 85 Pac. 1089.

72 Bathgate v. Irvine, 126 Cal. 135, 77 Am. St. Rep. 158, 58 Pac. 442.

73 Alta etc. Co. v. Hancock, 85 Cal. 219, 20 Am. St. Rep. 217, 24 Pac. 645; and *supra*, secs. 224, 226.

not so, and hence cannot found a right by adverse use, though it may a right by appropriation.[74]

§ 228. **Eminent Domain.**—Riparian rights are subject to a taking on eminent domain proceedings just as other property.[75]

§ 229. **By Natural Causes.**—The right will be lost by a natural change in the channel making the stream flow elsewhere; the riparian proprietor has no right to ditch it back.[76] This is known as "avulsion."[77]

F. DISTINCTION FROM APPROPRIATION.

§ 230. It is suggested that the following will be found the chief ways in which riparian rights differ from rights of appropriation:

(*a*) In the mode of acquisition—no formalities being needed to acquire riparian rights at common law.

(*b*) No necessity for beneficial use to hold riparian rights.

(*c*) Riparian rights are limited to reasonable use based on equality of all claimants, whereas appropriation is an exclusive right, tested only by priority.

(*d*) Riparian rights are limited to use on riparian lands, whereas appropriation is usually for distant lands.

(*e*) Riparian rights cannot be lost by abandonment.

§ 231. The attitude of the California court toward appropriation is aptly shown by contrasting the following passages:

74 Fifield v. Spring Valley Water Works, 130 Cal. 552, 62 Pac. 1054; and *ante*, sec. 198.

75 See *supra*, sec. 228, and Lux v. Haggin, 69 Cal. 255, 10 Pac. 674.

76 Paige v. Rocky Ford etc. Co., 83 Cal. 84, 21 Pac. 1102, 23 Pac. 875; Wholey v. Caldwell, 108 Cal. 95, 49 Am. St. Rep. 64, 41 Pac. 31, 30 L. R. A. 820.

77 Missouri v. Nebraska, 196 U. S. 23.

"When a party constructs a ditch, and diverts the waters of a stream before the rights of others have attached below, he only takes it from one unoccupied mining locality to another. In such case, there can, as a general rule, be no substantial injury done to the mining interest of the State, or to the rights of individuals. The water is taken to a locality where it is used; and after being so used, it finds its way to other mining localities, where it is again used. The effect of the diversion is not to diminish the number of times the water may be used. In the majority of cases, it is used as often, and upon the whole, as profitably, as if it had never been diverted, but had continued to flow down its natural channels. The general usefulness of the element is not impaired by the diversion. It may be very safely assumed that as much good, if not more, is accomplished by the diversion, as could have been attained, had such diversion never occurred. In fact, we must, in reason, presume that the water is taken to richer mining localities, where it is more needed, and, therefore, the diversion of the stream promotes this leading interest of the State. It was upon the principle, that the leading interest of the superior proprietor was attained by these diversions, that the decisions of this court sustaining them, were predicated."[78]

Contrast with this, Lux v. Haggin,[79] refusing to reject the common law *in toto:*

"In our opinion, it does not require a prophetic vision to anticipate that the adoption of the rule, so called, of 'appropriation' would result in time in a monopoly of all the waters of the State by comparatively few individuals, or combinations of individuals controlling aggre-

[78] Bear River etc. Co. v. New York etc. Co., 8 Cal. 327, 68 Am. Dec. 325.

[79] 69 Cal. 255, at 309, 10 Pac. 674.

gated capital, who could either apply the water to purposes useful to themselves, or sell it to those from whom they had taken it away, as well as to others."

APPENDIX A.

FEDERAL STATUTES.

CALIFORNIA STATUTES.

APPENDIX A.

FEDERAL STATUTES.

References are to Revised Statutes and Statutes at Large to and including 1904-05.

Revised Statutes.

Rev. Stats., sec. 2339. Whenever, by priority of possession, rights to the use of water for mining, agricultural, manufacturing, or other purposes, have vested and accrued, and the same are recognized and acknowledged by the local customs, laws, and the decisions of courts, the possessors and owners of such vested rights shall be maintained and protected in the same; and the right of way for the construction of ditches and canals for the purposes herein specified is acknowledged and confirmed; but whenever any person, in the construction of any ditch or canal, injures or damages the possession of any settler on the public domain, the party committing such injury or damage shall be liable to the party injured for such injury or damage.—Sec. 9, A. C., July 26, 1866.

Rev. Stats., sec. 2340. All patents granted, or preemption or homesteads allowed, shall be subject to any vested and accrued water rights, or rights to ditches and reservoirs used in connection with such water rights as may have been acquired under or recognized by the preceding section.—Sec. 17, A. C., July 9, 1870.

These statutes are the basis of the law of appropriation. See text, chapters I and II.

Miscellaneous Statutes.

The other acts of Congress chiefly concern the construction of irrigation reservoirs, setting aside lands therefor, and appropriating money. They are not directly aimed at the general law of waters. They recognize that the law of appropriation applies in the arid regions, but do not mention the rights of riparian proprietors. They usually contain saving clauses, protecting all vested rights. A list of these statutes follows:

19 Stats. 377, 1 Supp. Rev. Stats. 137. Enacted March, 3, 1877, Amended 1891. Concerning specified lands, and recognizing the law of appropriation as there in force "subject to existing rights." The first of the Arid or Desert Land Acts.

25 Stats. 505, par. 4, 1 Supp. Rev. Stats. 626 (1888).

25 Stats. 939, par. 4, 1 Supp. Rev. Stats. 698 (1889).

26 Stats. 371, par. 4, 1 Supp. Rev. Stats. 791, 792 (1891).

26 Stats. 1095, 1 Supp. Rev. Stats. 942, 946 (1891): Canal companies given right of way subject to liability for injury to settlers.

28 Stats. 372-427, 2 Supp. Rev. Stats. 259 (1894). Amended June 11, 1896 (29 Stats. 434, 2 Supp. Rev. Stats. 525). Known as "The Carey Act."

29 Stats. 599, 2 Supp. Rev. Stats. 563 (1897).

32 Stats. at Large, 677, 704. Concerning Philippines. "Beneficial use shall be the basis, the measure, and the limit of all rights to water in said islands." A common

phrase in the States rejecting riparian rights *in toto* (page 697). Sections 2339 and 2340, Revised Statutes are substantially enacted for the Philippines (page 704).

32 Stats. at Large, 388. Act of June 17, 1902. The present Irrigation Act. In Stats. 1904-05, page 706, this act is referred to as "the National Irrigation Law." In same, page 1032, it is referred to as "known as the Reclamation Act."

Briefly: The proceeds of sale of all public lands in the West are set aside. The Secretary of Interior is to plan irrigation works. He may withdraw from entry lands needed for prosecution of the work, and special rules are provided for entry of lands to be irrigated. Section 8 provides that this act shall not be construed to interfere with the laws of any State or Territory concerning water, or with any vested rights thereunder. The law of appropriation is recognized, "Provided that the right to the use of water acquired under the provisions of this act shall be appurtenant to the land irrigated, and beneficial use shall be the basis, the measure and the limit of the right." The statute follows in full.

National Irrigation Law.

CHAP. 1093.

An act appropriating the receipts from the sale and disposal of public lands in certain States and Territories to the construction of irrigation works for the reclamation of arid lands.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled:

Section 1. That all moneys received from the sale and disposal of public lands in Arizona, California, Colorado, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Utah, Washington, and Wyoming, beginning with the fiscal year ending June 30, 1901, including the surplus of

fees and commissions in excess of allowances to registers and receivers, and excepting the five per centum of the proceeds of the sales of public lands in the above States set aside by law for educational and other purposes, shall be, and the same are hereby, reserved, set aside, and appropriated as a special fund in the treasury to be known as the "reclamation fund," to be used in the examination and survey for and the construction and maintenance of irrigation works for the storage, diversion, and development of waters for the reclamation of arid and semi-arid lands in the said States and Territories, and for the payment of all other expenditures provided for in this act: *Provided*, that in case the receipts from the sale and disposal of public lands other than those realized from the sale and disposal of lands referred to in this section are insufficient to meet the requirements for the support of agricultural colleges, in the several States and Territories, under the act of August 30, 1890, "An act to apply a portion of the proceeds of the public lands to the more complete endowment and support of the colleges for the benefit of agriculture and the mechanic arts, established under the provisions of an act of Congress approved July 2, 1860," the deficiency, if any, in the sum necessary for the support of the said college shall be provided for from any moneys in the treasury not otherwise appropriated.

Sec. 2. That the Secretary of the Interior is hereby authorized and directed to make examinations and surveys for, and to locate and construct, as herein provided, irrigation works for the storage, diversion, and development of waters, including artesian wells, and to report to Congress at the beginning of each regular session as to the results of such examinations and surveys, giving estimates of cost of all contemplated works, the quantity and location of the lands which can be irrigated therefrom, and all facts relative to the practicability of each irrigation project; also the costs of works in process of construction as well as of those which have been completed.

Sec. 3. That the Secretary of the Interior shall, before giving the public notice provided for in section 4 of this act, withdraw from public entry the lands required for any irrigation works contemplated under the provisions of this act, and shall restore to public entry any of the lands so withdrawn when, in his judgment, such lands are not required for the purposes of this act; and the Secretary of the Interior is hereby authorized, at or immediately prior to the time of beginning the surveys for any contemplated irrigation works, to withdraw from entry, except under the homestead laws, any public lands believed to be susceptible of irrigation from said works: *Provided*, that all lands entered and entries made under the homestead laws within areas so withdrawn during such withdrawal shall be subject to all the provisions, limitations, charges, terms, and conditions of this act; that said surveys shall be prosecuted diligently to completion, and upon the completion thereof, and of the necessary maps, plans

and estimates of cost, the Secretary of the Interior shall determine whether or not said project is practicable and advisable, and if determined to be impracticable and unadvisable, he shall thereupon restore said lands to entry; that public lands which it is proposed to irrigate by means of any contemplated works shall be subject to entry only under the provisions of the homestead laws in tracts of not less than forty nor more than one hundred and sixty acres, and shall be subject to the limitations, charges, terms, and conditions herein provided: *Provided*, that the commutation provisions of the homestead laws shall not apply to entries made under this act.

Sec. 4. That upon the determination by the Secretary of the Interior that any irrigation project is practicable, he may cause to be let contracts for the construction of the same in such portions or sections as it may be practicable to construct and complete as parts of the whole project, providing the necessary funds for such portions or sections are available in the reclamation fund, and thereupon he shall give public notice of the lands irrigable under such project, and limit of area per entry, which limit shall represent the acreage which, in the opinion of the Secretary, may be reasonably required for the support of a family upon the lands in question; also of the charges which shall be made per acre upon the said entries, and upon lands in private ownership which may be irrigated by the waters of the said irrigation project, and the number of annual installments, not exceeding ten, in which such charges shall be paid and the time when such payments shall commence. The said charges shall be determined with a view of returning to the reclamation fund the estimated cost of construction of the project, and shall be apportioned equitably: *Provided*, that in all construction work eight hours shall constitute a day's work, and no Mongolian labor shall be employed thereon.

Sec. 5. That the entryman upon lands to be irrigated by such works shall, in addition to compliance with the homestead laws reclaim at least one-half of the total irrigable area of his entry for agricultural purposes, and before receiving patents for the lands covered by his entry shall pay to the Government the charges apportioned against such tract, as provided in section 4. No right to the use of water for land in private ownership shall be sold for a tract exceeding one hundred and sixty acres to any one landowner, and no such sale shall be made to any landowner unless he be an actual *bona fide* resident on such land, or occupant thereof residing in the neighborhood of said land, and no such right shall permanently attach until all payments therefor are made. The annual installments shall be paid to the receiver of the local land office of the district in which the land is situated, and failure to make any two payments when due shall render the entry subject to cancellation, with the forfeiture of all rights under this act, as well as any moneys already paid thereon.

All moneys received from the above sources shall be paid into the reclamation fund. Registers and receivers shall be allowed the usual commissions on all moneys paid for lands entered under this act.

Sec. 6. That the Secretary of the Interior is hereby authorized and directed to use the reclamation fund for the operation and maintenance of all reservoirs and irrigation works constructed under the provisions of this act: *Provided*, That when the payments required by this act are made for the major portion of the lands irrigated from the waters of any of the works herein provided for, then the management and operation of such irrigation works shall pass to the owners of the lands irrigated thereby, to be maintained at their expense under such form of organization and under such rules and regulations as may be acceptable to the Secretary of the Interior: *Provided*, That the title to, and the management and operation of, the reservoirs and the works necessary for their protection and operation shall remain in the Government until otherwise provided by Congress.

Sec. 7. That where, in carrying out the provisions of this act, it becomes necessary to acquire any rights or property, the Secretary of the Interior is hereby authorized to acquire the same for the United States by purchase or by condemnation under judicial process, and to pay from the reclamation fund the sums which may be needed for that purpose, and it shall be the duty of the Attorney-General of the United States upon every application of the Secretary of the Interior, under this act, to cause proceedings to be commenced for condemnation within thirty days from the receipt of the application at the Department of Justice.

Sec. 8. That nothing in this act shall be construed as affecting or intended to affect or to in any way interfere with the laws of any State or Territory relating to the control, appropriation, use, or distribution of water used in the irrigation, or any vested right acquired thereunder, and the Secretary of the Interior, in carrying out the provisions of this act, shall proceed in conformity with such laws, and nothing herein shall in any way affect any right of any State or of the Federal Government or of any landowner, appropriator, or user of water in, to, or from any interstate stream or the waters thereof: *Provided*, That the right to the use of water acquired under the provisions of this act shall be appurtenant to the land irrigated and beneficial use shall be the basis, the measure, and the limit of the right.

Sec. 9. That it is hereby declared to be the duty of the Secretary of the Interior in carrying out the provisions of this act so far as the same may be practicable and subject to the existence of feasible irrigation projects, to expend the major portion of the funds arising from the sale of public lands within each State and Territory hereinbefore named for the benefit of arid and semi-arid lands within the limits of such State or Territory; *Provided*, That the secretary

may temporarily use such portion of said funds for the benefit of arid or semi-arid lands in any particular State or Territory hereinbefore named as he may deem advisable, but when so used the excess shall be restored to the fund as soon as practicable, to the end that ultimately, and in any event, within each ten-year period after the passage of this act, the expenditures for the benefit of the said States and Territories shall be equalized according to the proportions and subject to the conditions as to practicability and feasibility aforesaid.

Sec. 10. That the Secretary of the Interior is hereby authorized to perform any and all acts and to make such rules and regulations as may be necessary and proper for the purpose of carrying the provisions of this act into full force and effect.

Approved June 17, 1902.

The first work completed under this act is the Truckee-Carson project in Nevada. In the report for 1903-04, of A. E. Chandler, then State Engineer of Nevada, it is said:

"To obviate possible future complications agreements have been secured from all but four or five of the owners of these lands, exclusive of the Indians, whereby the United States Government agrees to supply from the canals to be constructed by it, free of cost, water for the irrigation of all land now under cultivation and irrigation, and in consideration therefor the landowners agree to convey all the water rights owned or claimed by them, together with all dams and ditches for the diversion of water, to the United States."

CALIFORNIA.

Constitution.

Constitution, article XIV, section 1. The use of all water now appropriated, or that may hereafter be appropriated, for sale, rental, or distribution, is hereby declared to be a public use, and subject to the regulation and control of the State, in the manner to be prescribed by law; provided, that the rates or compensation to be collected by any person, company, or corporation in this State for the use of water supplied to any city and county, or city or town, or the inhabitants thereof, shall be fixed, annually, by the board of supervisors, or city and county, or city or town council, or other governing body of such city and county, or city or town, by ordinance or otherwise, in the manner that other ordinances or legislative acts or resolutions are passed by such body, and shall continue in force for one year and no longer. Such ordinances or resolutions shall be passed in the month of February of each year, and take effect on the first day of July thereafter. Any board or body failing to pass the necessary ordinances or resolutions fixing water rates, where necessary, within such time, shall be subject to peremptory process to compel action at the suit of any party interested, and shall be liable to such further processes and penalties as the legislature may prescribe. Any person, company, or corporation collecting water rates in any city and county, or city or town in this State, otherwise than as so established, shall forfeit the franchises and waterworks of such person, company, or corporation to

the city and county, or city or town where the same are collected, for the public use.

Constitution, article I, section 14. Private property shall not be taken or damaged for public use without just compensation having been first made to, or paid into court, for the owner, and no right of way shall be appropriated to the use of any corporation other than municipal until full compensation therefor be first made in money or ascertained and paid into court for the owner, irrespective of any benefit from any improvement proposed by such corporation, which compensation shall be ascertained by a jury, unless a jury be waived, as in other civil cases in a court of record, as shall be prescribed by law.

Civil Code.

DIVISION SECOND, TITLE VIII—WATER RIGHTS.

Section 1410. Rights to Water may be Acquired by Appropriation. The right to the use of running water flowing in a river or stream, or down a canyon or ravine, may be acquired by appropriation. En. March 21, 1872.

Section 1411. Appropriation must be for a Useful Purpose. The appropriation must be for some useful or beneficial purpose, and when the appropriator or his successor in interest ceases to use it for such a purpose, the right ceases. En. March 21, 1872.

Section 1412. Point of Diversion may be Changed. The person entitled to the use may change the place of diversion, if others are not injured by such change, and may extend the ditch, flume, pipe, or aqueduct by which the diversion is made to places beyond that where the first use was made. En. March 21, 1872.

Section 1413. Water may be Turned into Natural Channels. The water appropriated may be turned into

the channel of another stream and mingled with its water, and then reclaimed; but in reclaiming it the water already appropriated by another must not be diminished. En. March 21, 1872.

Section 1414. First in Time, First in Right. As between appropriators, the one first in time is the first in right. En. March 21, 1872.

Section 1415. Notice of Appropriation. A person desiring to appropriate water must post a notice, in writing, in a conspicuous place at the point of intended diversion, stating therein:

1. That he claims the water there flowing to the extent of (giving the number) inches measured under a four-inch pressure;

2. The purposes for which he claims it, and the place of intended use;

3. The means by which he intends to divert it, and the size of the flume, ditch, pipe, or aqueduct in which he intends to divert it.

A copy of the notice must, within ten days after it is posted, be recorded in the office of the recorder of the county in which it is posted.

After filing such copy for record, the place of intended diversion or the place of intended use or the means by which it is intended to divert the water, may be changed by the person posting said notice or his assigns, if others are not injured by such change. This provision applies to notices already filed as well as to notices hereafter filed. En. March 21, 1872. Amd. 1903, 361.

Section 1416. Work on Water Rights. Within sixty days after the notice is posted, the claimant must commence the excavation or construction of the works in

which he intends to divert the water, or the survey, road or trail building, necessarily incident thereto, and must prosecute the work diligently and uninterruptedly to completion, unless temporarily interrupted by snows or rain; provided, that if the erection of a dam has been recommended by the California debris commission at or near the place where it is intended to divert the water, the claimant shall have sixty days after the completion of such dam in which to commence the excavation or construction of the works in which he intends to divert the water. En. March 21, 1872. Amd. 1895, 70; 1903, 396.

Section 1417. Completion Defined. By "completion" is meant conducting the waters to the place of intended use. En. March 21, 1872.

Section 1418. Doctrine of Relation Applied. By a compliance with the above rules the claimant's right to the use of the water relates back to the time the notice was posted. En. March 21, 1872.

Section 1419. Forfeiture. A failure to comply with such rules deprives the claimants of the right to the use of the water as against a subsequent claimant who complies therewith. En. March 21, 1872.

Section 1420. Rights of Present Claimant. Persons who have heretofore claimed the right to water, and who have not constructed works in which to divert it, and who have not diverted nor applied it to some useful purpose, must, after this title takes effect, and within twenty days thereafter, proceed as in this title provided, or their right ceases. En. March 21, 1872.

Section 1421. Recorder to Keep Book in Which to Record Notices. The recorder of each county must keep a book, in which he must record the notices provided for in this title. En. March 21, 1872.

Section 1422. Title not to Affect Rights of Riparian Proprietors. If the place of intended diversion or any part of the route of intended conveyance of water so claimed, be within, and a part of, any national park, forest reservation, or other public reservation, and be so shown in the notice of appropriation of said water, then the claimant shall have sixty days, after the grant of authority to occupy and use such park or reservation for such intended purpose, within which to commence the excavation or construction of said works; provided that within sixty days after the posting of said notice of appropriation, as provided in section 1415 of the Civil Code, the claimant shall in good faith commence (and thereafter diligently and continuously, except when temporarily interrupted by snow or rain, prosecute to completion) such surveys and other work as under the regulations governing such park or reservations, may be required as preliminary to, or for use with, an application for such authority; and provided also that the claimant shall in good faith on completion of said survey and preliminary work, apply to the officer, board, or body, having charge of such park or reservation, for such authority, and shall thereafter, prosecute said application with reasonable diligence. En. March 21, 1872. Rep. 1887, 114. En. 1903, p. 397.

Section 1422 formerly read as follows:

"The rights of riparian proprietors are not affected by the provisions of this title."

In the Session of 1887 (Stats., p. 114), the year following the decision of Lux v. Haggin, section 1422 was repealed with the proviso "that the repeal of this section shall not in any way interfere with any rights already vested." The effect of this repeal has never been directly passed upon by the court, but many cases since then have affirmed the rights of riparian proprietors, following Lux v. Haggin. The fact that this repeal has not disturbed the California doctrine indicates that Lux v. Haggin is taken to have upheld riparian rights as much on constitutional principles as on section 1422 of the code.

In 1903 (Stats., p. 397) a new section 1422 was added, saying nothing of riparian proprietors. In the codes, however, the new section 1422 is printed as above.

TITLE IX—HYDRAULIC MINING.

Section 1424. Where Hydraulic Mining can be Carried on. The business of hydraulic mining may be carried on within the State of California wherever and whenever the same can be carried on without material injury to the navigable streams, or the lands adjacent thereto. En. Stats. 1893, 337.

Section 1425. Meaning of Hydraulic Mining. Hydraulic mining, within the meaning of this title, is mining by means of the application of water, under pressure, through a nozzle, against a natural bank. En. Stats. 1893, 337.

Miscellaneous Sections of the Civil Code.

Sections 548-552, Civil Code. Concerning corporations distributing water.

Section 551, Civil Code. No canal, flume, or other appliance for the conducting of water must be so laid, constructed, or maintained as to obstruct any public highway; and every person or corporation owning, maintaining, operating or using any such canal, flume, or appliance, crossing or running along any public highway, must construct, maintain, and keep in repair such bridges across the same as may be necessary to the safe and convenient use of such highway by the public; and on failure so to do, the board of supervisors of the county, after seven days' notice in writing to said person or corporation, may construct or repair such bridge or bridges, and recover of such person or corporation the amount of the expenditure made in so doing. En. March 21, 1872. Amd. 1905, 580.

Section 552, Civil Code. Right of Purchaser to Use Water for Irrigating. Whenever any corporation, organized under the laws of this State, furnishes water to irrigate lands which said corporation has sold, the right to the flow and use of said water is and shall remain a perpetual easement to the land so sold, at such rates and terms as may be established by said corporation in pursuance of law. And whenever any person who is cultivating land, on the line and within the flow of any ditch owned by such corporation, has been furnished water by it, with which to irrigate his land, such person shall be entitled to the continued use of said water, upon the same terms as those who have purchased their land of the corporation. En. Stats. 1875-76, 77.

Section 842, Civil Code. When two or more persons are associated by agreement in the use of a ditch, flume, pipe-line or other conduit for the conveyance of water, or who are using such ditch, flume, pipe-line or other conduit, or any part thereof, for the irrigation of land or for any other lawful purpose, to the construction of which they or their grantors have contributed, he is liable to the others for the reasonable expenses of maintaining and repairing the same, and of distributing such water in proportion to the share to which he is entitled in the use of the water. En. Stats. 1905, 600. (See Statute of 1889, *infra.*)

Section 843, Civil Code. If any one of them neglects, after demand in writing, to pay his proportion of such expenses, he is liable therefor in an action for contribution, and in any judgment obtained against him interest from the time of such demand must be included. The action authorized by this section must be brought by any or all of the parties who have contributed more than his or their just proportion of such expenses, and may be joint or several, and therein plaintiff may re-

cover as costs, reasonable counsel fees, to be fixed by the court. En. Stats. 1905, 600. (See Statute of 1889, *infra.*)

Code of Civil Procedure.

Section 532, Code of Civil Procedure. . . . . In all actions pending, or which may hereafter be brought, when an injunction or restraining order has been or may be granted or applied for, to prevent the diversion pending the litigation, of water used or to be used for irrigation or domestic purposes only, if it be made to appear to the court that great damage will be suffered by the defendant in case the injunction is continued, and that the plaintiff can be fully compensated for any damages he may suffer by reason of the continuance of the acts of the defendant during the pendency of the litigation, the court, in its discretion, may dissolve or modify the injunction, upon the defendant giving a bond, with sureties to be approved by the judge, and in such amount as may be fixed by the court or judge, conditioned that the defendant will pay all damages which the plaintiff may suffer by reason of the continuance during the litigation of the acts complained of. Upon the trial the amount of such damages shall be ascertained, and in case judgment is rendered for the plaintiff, the amount fixed as such damages shall be included in the judgment, together with reasonable attorney's fees. Upon a suit brought on the bond the amount of damages as fixed in said judgment shall be conclusive upon the sureties. En. March 11, 1872. Amd. 1887, 241.

Penal Code.

Penal Code, sections 347, 374, 420, 499, 592, 607, 629. (See text, sec. 172.)

Miscellaneous Statutes.

Statutes of 1854, page 76, last amended 1862, p. 234, appointed water commissioners for a few counties, viz.: Contra Costa, Colusa, Los Angeles, Napa, San Bernardino, San Diego, Santa Barbara, Solano, and Tulare only. Pol. Code, sec. 19, continues in force acts concerning water commissioners.

Statutes of 1877-78, page 195, concerning waste of water from artesian wells. A similar statute was held unconstitutional in Huber v. Merkel, 117 Wis. 355, 98 Am. St. Rep. 933, 94 N. W. 354.

Statutes of 1889, page 202:

Section 1. When two or more persons are associated by agreement in the use of a ditch or flume, or are using for the irrigation of land a ditch or flume, to the construction of which they or their grantors have contributed, each of them shall be liable to the other for the reasonable expense of maintaining and repairing the same in proportion to the share in the use of the water to which he is entitled.

Section 2. If any of them refuse or neglect, after demand in writing, to pay his proportion of such expenses, he shall be liable therefor in an action for contribution in the nature of an action on the case, and in any judgment obtained against him, interest from the time of such demand at the rate of two per cent per month may be included.

Section 3. If any of them willfully appropriate to his own use more than his proportionate share of the water from such ditch or flume, to the detriment of his associates, or any of them, he shall be liable in damages in treble the value of the water so appropriated in excess of his proper share.

Section 4. The actions provided for in sections two and three may be brought by any or either of the parties injured, and may be joint or several.

Section 5. This act shall take effect from and after its passage.

Statutes of 1905, page 152, chapter 157, provides for co-operation of the State of California with the Federal government's irrigation plans under the National Irrigation Act, provided it does not "interfere with the water already appropriated or in reservoirs or now in use for irrigation purposes, or domestic purposes, under the laws of this State."

Irrigation District Statutes.

The first legislation in this line was the Statute of 1871-72, p. 945. This is probably repealed by the Act of 1897. (See Gen. Laws, p. 498.) The first elaborate act for the formation of irrigation districts was the Wright Act of 1887, p. 29. All previous acts were repealed by the Act of 1897, p. 254. (Gen. Laws, p. 498.) The present law is briefly as follows:

Act 1897, pp. 254, 394.
Am. 1901, p. 815.
Supplemented 1903, p. 3.
Am. 1905, c. 33.

Purpose. To allow organization by owners of land susceptible of one system of irrigation.

Proceedings to Organize. Petition by owners to board of supervisors; published. Hearing before supervisors, with right of objectors to appeal to superior court. Five subdivisions formed by order of supervisors, one director to be elected by each subdivision.

Election held to obtain final assent of owners and to elect officers. Supervisors declare the district duly organized, if carried, and copy of this order recorded.

Officers. Board of five (or in some cases, three) directors, assessor, tax collector, treasurer.

Directors. Classified by length of tenure (some two, some four years; sec. 20.) Must meet monthly. Records open for inspection. Must publish annual reports. Control and carry on the irrigation works. Powers enumerated in detail. Director must be a resident and freeholder of the district.

Property. District may acquire water rights by condemnation or purchase. (Sec. 15.) Title to property is in the district in trust. (Sec. 15. See Merchants' Bank v. Escondido etc. Irr. Dist., 144 Cal. 329.) Is given all waters belonging to the State within the district. (Secs. 53-56.) Has right of way for canals, etc., but otherwise must not interfere with navigation or mining (Sec. 64) or with existing vested rights. (Sec. 65.)

Operations. Controlled by directors, who may establish by-laws and regulations, to be printed and distributed. Is in public service. Water shall be apportioned in proportion to the money last assessed to owner for district purposes. In time of scarcity, water apportioned between districts by a board of water commissioners consisting of the chairmen of the boards of directors of all districts affected. (Sec. 62.)

May contract for construction work. (Secs. 53-56.) May lease the works. Must advertise for bids. Lease must not be for longer than twenty-five years. Forfeited for non-payment of rent for ninety days. (Sec. 100.) See, also, Stats. 1893, p. 295.

Election. (Secs. 19-28.) Every two years. Vacancies filled by board of directors. Detailed provisions governing elections.

Bonds. May issue bonds. (Sec. 30.) First submitted at an election. Issued in ten series. May assess to pay interest and principal. Bonds may be redeemed. (Sec. 52.) Validity of bonds and organization may be tested and confirmed in suit in superior court, on behalf of district or individual, and has the effect of a proceeding *in rem*, summons being published. (Sec. 68.) Bonded debt may be reduced. Must be balloted on. Must have consent of bondholders to take up outstanding bonds. (Sec. 98 et seq.) See Stats. 1891, p. 53.

Assessments. All real property may be assessed to raise funds. (Sec. 33.) If voted at polls, assessor must perform duties. (Prescribed in detail.) Directors act as board of equalization. After property duly assessed, directors must levy the assessment. County officials may act if district officials refuse to assess and levy when needed. The assessment is a lien on the property assessed. Delinquent notice, delinquent sale, and redemption after sale provided for in detail. Redemption must be within twelve months.

Inclusion and Exclusion of Land after Organization. Land may be excluded. Consent of bondholders or decree of court required. If excluded, is released from liens thereon. (Secs. 74-78.) Land may be included. Petition. Ballot. (Sec. 85 et seq.)

Saving Clauses. Not affect navigation or mining except to give right of way for canals, etc. (Sec. 64.) Not affect existing rights. (Sec. 65.) Not affect existing districts. (Sec. 109.)

Dissolution. (Stats. 1903, p. 3.) Petition to board of directors. Statement made of assets and indebtedness and plan of settlement. Election thereon, which must be carried by two-thirds vote. Directors then petition superior court. Summons published. Has effect of a proceeding *in rem*. Corporation under general laws may take over the property. Decree rendered settling rights of creditors. When all settled the court shall enter a final decree declaring district dissolved.

Statutes for the formation of irrigation districts based on the Wright Act of California, exist in Colorado (3 M. A. S., 1905 ed., sec. 2309a et seq.), Idaho (Stats. 1899, p. 408; Stats. 1903, p. 150), Kansas (Gen. Stats. 1899, secs. 3575-3598; Gen. Stats. 1901, sec. 3683 et seq.), Nebraska (Comp. Stats. 1903, sec. 6476 et seq.), Nevada (Comp. Laws 1900, secs. 324-423), Utah (Rev. Stats. 1898, sec. 1287 et seq. Repealed, but leaving existing districts. See Stats. 1905, c. 108, sec. 71), and Washington (Ballinger's Codes, secs. 4166-4249).

See text, sec. 21.

APPENDIX B.

SYNOPSIS OF STATUTES.

(329)

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SYNOPSIS OF STATUTES.

The following synopsis of the statutes of the Western States upon waters is intended merely as a guide to the main features thereof, and as an indication of the recent character and extent of legislation. The statutes of the majority of the States are too voluminous to be given in detail, and only the most important features are noted. The recent Irrigation Code of Utah is, however, given in full as an example of the new legislation.

The paragraph "concerning riparian rights" is intended to point out provisions similar to those which have influenced courts following the Colorado view in rejecting the common law of riparian rights *in toto*. These clauses sometimes appear also in the irrigation codes of the States where the California doctrine recognizing the common law of riparian rights has hitherto been in force. It is suggested that perhaps it would be worth while, in these States, to have a clause expressly saving the existing rights of existing riparian proprietors, for the reasons discussed in section 20 of the text.

The laws of Wyoming are largely the result of labors of Mr. Elwood Mead, formerly State Engineer of Wyoming, and now Chief of the Irrigation Investiga-

tion of the United States Department of Agriculture. In Wyoming, Colorado and Nebraska these statutes have been in force for some time. In 1901 an attempt was made to introduce in California, by what was known as the Works bill, an administrative code similar to the laws of Wyoming, but this failed of passage because of the opposition of irrigators in Southern California. In 1903, at the direct solicitation of commissions appointed by the governors of Oregon and Washington, a draft for a code was prepared by Mr. Morris Bien, the head of the legal department of the United States Reclamation Service. This code was partially adopted in Oregon, but failed entirely of passage in Washington. Nevertheless it was substantially enacted in North Dakota, South Dakota and Oklahoma, in the statutes given below. The draft by Mr. Bien was based upon the codes already existing in Wyoming, Utah and Idaho.

The writer understands that while legislation of this kind is favored by all engineers, whether of the Department of Agriculture or of the Reclamation Service of the Department of the Interior, yet the Department of Agriculture is most pleased with the part of it looking to the encouragement of private enterprises.

Not the least interesting feature of the irrigation code legislation is the clause which places a maximum limit upon the quantity which an appropriator may have for irrigation. The effect of this clause upon existing owners is the subject of much discussion. Some believe that anyone who has already appropriated more than the limit allowed for irrigation cannot now be made to take less, claiming the protection of the fourteenth amendment. Others insist that the doctrine of appropriation never gave existing owners the right to waste water, and that the statute merely provides a

legislative definition of what constitutes waste. It seems to the writer not impossible that the courts will declare that what constitutes waste is a question of fact depending upon the evidence in each case, and not a question of law for declaration by the legislature. The Attorney General of Nebraska, however, in 1902, advised the State Engineer that such a limitation is valid, against existing appropriators as well as new ones, relying on the California cases of Barrows v. Fox, and Natoma etc. Co. v. Hancock, which prohibit waste, as cited in the text.

ARIZONA.

The law of Arizona is covered by the chapter in Revised Statutes of 1901, page 1045, and is declared by the courts to be influenced by the civil law. (Clough v. Wing, 2 Ariz. 371, 17 Pac. 453; Austin v. Chandler (Ariz.), 42 Pac. 483.) The court follows the Colorado system rejecting the common law *in toto*.

Revised Statutes 1901, section 4168 (Civil Code). "The common-law doctrine of riparian water rights shall not obtain or be of any force in this territory."

Revised Statutes 1901, section 4174 (Civil Code). "All rivers, creeks, and streams of running water in the territory of Arizona are hereby declared public, and applicable to the purposes of irrigation and mining as hereinafter provided."

The system there provided is in many respects peculiar to Arizona.

COLORADO.

References are to Mills' Annotated Statutes, volumes 1, 2, 3 (1905 ed.); Constitution, article XVI.

There is much statutory law upon this subject in Colorado, and the courts have frequently declared irrigation to be one of the most urgent matters in the State.

Declaration of State Ownership.—"The water of every natural stream not heretofore appropriated, within the State of Colorado, is hereby declared to be the property of the public." (Const., art. XVI, sec. 5.)

Concerning Riparian Rights.—Constitution, article 16, section 6, provides that the right to appropriate unappropriated water shall never be denied. The courts have declared that the rejection of riparian rights is not impaired by a statute (M. A. S. 2256), which provides that all landowners on the banks of a stream are entitled to the use of the water for irrigation, as that merely confers the right to appropriate. (See Oppenlander v. Left Hand Ditch Co., 18 Colo. 142, 31 Pac. 854; Crippen v. White, 28 Colo. 289, 64 Pac. 184; but see Schwab v. Beam, 86 Fed. 41.)

Preferences and Pro-rating.—In case of deficiency of water domestic uses prevail over others, and next, irrigation. (Const., art. XVI, sec. 6.) The water commissioners may pro-rate the water in time of deficiency between all appropriators, by volume or by time of use. (M. A. S. 2259, 2267.) Between consumers from the same ditch, pro-rating is provided for in times of scarcity (in M. A. S. 2267). An appropriation for domes-

tic use shall not be used for irrigation to any extent whatever (saving cities the right to sprinkle streets). (3 M. A. S., 1905 ed., 2269a.)

Administration.—All waters are dedicated to the use of the people of the State, subject to appropriation. (Const., art. 16, sec. 5.) The whole State is divided into five *irrigation divisions.* (3 M. A. S., 1905 ed., 2440 et seq.) The office of superintendent of irrigation is abolished, and five irrigation division engineers established, one for each division. *(Ibid.)* The irrigation division engineer has general control over the water commissioners of the districts within his division, and makes rules for carrying out the decreed priorities. (*Ibid.*)

Within the irrigation divisions there are *water districts* (unincorporated). There are sixty-eight of these, formed according to the location of the water supplies, and they are enumerated in M. A. S. 2310 et seq. There is one water commissioner for each district, whose duties are to carry out the priorities decreed by court (M. A. S. 2381, 2384) and to keep a general lookout over the district. (See 3 M. A. S., 1903 ed., 2381-2385a.) He may invoke the aid of the sheriff or constable (M. A. S. 2384), and has himself the power of a constable. (M. A. S. 2366.)

The State Engineer has general control over all (3 M. A. S., 1905 ed., 2447h), and general supervising control over all waters within the State. (M. A. S. 2459; 3 M. A. S., 1905 ed., 2286a, 2286b.)

Determination of Existing Priorities.—The Colorado system of determining and adjusting rights, which has been copied in some other States, consist exclusively (3 M. A. S. 2339, 1905 ed.) in a special proceeding before court. The claimant makes an application to the district court

or a judge thereof, and a notice thereof is published. (M. A. S. 2405 et seq.) The form of hearing is specially provided for. (M. A. S. 2403.) The judge may order the hearing before a referee, in which case the form of hearing is likewise specially provided for. (M. A. S. 2409 et seq.)

The decree must be specific. A certificate thereof is given and the holder files the certificate with the water commissioners, who act accordingly. (M. A. S. 2404.) The certificates must be numbered consecutively (M. A. S. 2408) and be recorded. (M. A. S. 2404.) An appeal may be taken to the supreme court. (M. A. S. 2427 et seq.) A list of decreed priorities is kept by the State Engineer and the Irrigation Division Engineer. (3 M. A. S., 1905 ed., 2447i.)

A similar procedure is provided for appropriations for other uses as well as for irrigation (3 M. A. S., 1905 ed., 2399a et seq.); and for changes in the place of diversion. (3 M. A. S., 1905 ed., 2273d et seq.)

Method of Appropriating.—Within sixty days after beginning work the appropriator must file two duplicate *maps* with the State Engineer, in a form satisfactory to him, showing headgates, route, high-water line of reservoirs, feeders, etc., ditches leading to or from canals, etc., and the lands where built. Attached to the maps must be *sworn statements* of location of headgate, dimensions of works, capacity, time of commencement of work, estimate of cost. The State Engineer, if he approves, returns the duplicate map and statement with a *certificate* of approval, which claimant *records* with county clerk and recorder. "Provided nothing herein contained shall be construed so as to dispense with the necessity for due diligence in the construction of such projects, or to the injury of those having prior rights to those of the claim-

ants"—or to prevent adjudication of priority as elsewhere provided. (3 M. A. S., 1905 ed., secs. 2265a-2265h.)

Reservoirs.—Special provisions for reservoirs having a capacity of over seventy-five million cubic feet, etc., are contained in 3 M. A. S., 1905 ed., 2270a et seq.; 2286d et seq.; M. A. S. 2270.

Measurement of Water.—The State Engineer shall furnish a rating table to be used in measuring the water flowing to or from a public stream into which it has been discharged for conveyance. (3 M. A. S., 1905 ed., 2286c.) The unit of measurement in general is, for flowing water, one cubic foot per second; for volume, one cubic foot. (M. A. S. 2467.)

IDAHO.

References are to Laws of 1903, page 223, and amendments in Laws of 1905; Civil Code, 1901, section 2625 et seq.; Code of Civil Procedure, 1901, section 3791 et seq.; Constitution, article XV.

Declaration of State Ownership.—There is no express declaration on this point in the law of 1903 or its amendments; but the Civil Code of 1901, section 2625, contains the following: "All waters of the State when flowing in their natural channels, including the waters of all natural springs and lakes within the boundaries of the State, are declared to be the property of the State."

Concerning Riparian Rights.—"All rights to divert and use the waters of this State for beneficial purposes shall hereafter be acquired and confirmed under the provisions of this Act." (Stats. 1903, p. 223, sec. 41. See, also, Constitution, art. XV.) The courts follow the Colorado system rejecting riparian rights *in toto.* (See text.)

Administration.—The State of Idaho is, by the statute, divided into three water divisions, numbered 1, 2 and 3 (Stats. 1903, p. 223, secs. 13-16), with one water commissioner for each division (*Ibid.*, sec. 17), to hold office for six years. (*Ibid.*, sec. 18.) He shall have general control over his division, under the general supervision of the State Engineer. (*Ibid.* 19, as amended 1905, p. 361.)

The State Engineer, after the passage of this Act, shall make an examination of the streams of the State

(beginning with those whose waters have not yet been allotted), with maps and complete information, on which maps he shall add all rights hereafter licensed or decreed. (Stats. 1903, p. 223, sec. 33.)

A State Board of Irrigation is constituted, consisting of the State Engineer, and the three water commissioners. No meeting of said board shall exceed five days, once a year. The board shall provide general rules and regulations concerning proof of completion of works, and for the distribution of water. (Sec. 22.)

The Board of Irrigation shall divide the State into water districts, from time to time, as priorities become adjudicated; with one master for each, appointed by the water commissioner of the division, and holding office for one year; in some cases elected by the appropriators. The water master regulates the distribution of water among the several ditches and to the several appropriators. (*Ibid.*, secs. 23, 24.) The water masters must report to the division commissioner, who issues such orders as are necessary to enforce the tabulated priorities of his whole division without inequality among districts. (*Ibid.*, sec. 25.) The water master shall shut headgates when necessary, having power to arrest all who waste water or interfere with measuring devices, headgates, etc. (*Ibid.*, sec. 26.) The water masters shall not begin work until requested in writing by two or more appropriators (*Ibid.*, sec. 27), the pay of the water master being a charge against the land of the users who call him in, or against the canal of the canal company, if called in by such company.

Appropriators must maintain headgates, rating flumes, and measuring devices, under plans furnished by the State Engineer, and if they fail to do so, the county may build them at the cost of the appropriator, closing the headgate if he refuses to pay. (*Ibid.*, sec. 31.)

Determination of Existing Priorities.—See, also, Code of Civil Procedure (1901), section 3791. Where the waters of any stream have not yet been adjudicated, the water commissioner within three months after the passage of this act must bring suit in the district court against any and all claimants whose rights are unadjudicated, serving summons by publication. The proceedings shall be conducted in the same manner as actions for the adjudication of water rights, and the decree shall be deemed a part of and supplementary to the original decree. (Stats. 1903, p. 223, secs. 34, 35.)

Whenever suit is filed in the district court for the adjudication of priorities, the judge shall ask the State Engineer to make an examination of the stream as provided in section 33, preparing a map and gathering information, his expenses forming part of the costs in the action, and a lien on the lands and water rights of the parties. (Stats. 1903, p. 223, sec. 37, as amended 1905, p. 357.) The decree must specify the time (not exceeding four years) and amount allowed for future needs. (*Ibid.*, sec. 38.)

Certified copies of decrees now on file must be sent by the clerks of the various district courts to the State Engineer, who tabulates them and sends a certified copy to each water commissioner, who in turn tabulates those of his division and distributes printed copies to the users. The commissioner each year shall print a list of all decrees or licenses issued from time to time and distribute copies among the users. (*Ibid.*, secs. 39, 40.) Certified copies of all decrees hereafter are transmitted by the clerks of the courts to the State Engineer. (*Ibid.*, sec. 39.)

Method of Appropriating.—Before commencing the construction, enlargement or extension, or change in the

point of diversion of the ditch, canal or other distributing works, an application must be made to the State Engineer for a permit. "Such application must set forth. (1) The name and postoffice address of the applicant; (2) the source of the water supply; (3) the nature of the proposed use; (4) the location and description of the proposed ditch, channel or other work, and the amount of water to be diverted and used; (5) the time required for the completion of construction of such works, which in no case shall exceed five years from the date of approval of application; (6) the time required for the complete application of the water to the proposed use, which must be within four years after the date set for the completion of such works." Duplicate detailed maps must accompany the application; also, if a corporation, specified detailed matters must be stated concerning the corporation. If for other than irrigation purposes, a statement of the purpose, description of works, whether the water is to be returned to the stream, and where. If for agricultural purposes, a description of the land to be irrigated. (Stats. 1903, p. 223, sec. 1, as amended 1905, p. 357.)

These applications must be numbered consecutively and by the State Engineer, who indorses thereon the date of receipt, and makes a record thereof. He may require the application to be corrected. On approval, the application is so indorsed and returned to the applicant, constituting a permit to proceed. (Stats. 1903, p. 223, sec. 2, as amended 1905, p. 357.)

If the capacity of the works is less than twenty-five cubic feet per second, work must be begun within sixty days, and prosecuted with diligence; if over twenty-five cubic feet per second, a bond must be filed within sixty days, in an amount not over $10,000 fixed by the State Engineer, for the faithful prosecution of the work. (Sec.

3.) Work must be completed within five years, or less if the State Engineer so requires, at least one-fifth of the work being done within the first half of the time allowed. Actual application and use of the water must follow within four years, or less if the State Engineer so requires. Appeal from the indorsement by the State Engineer lies to the district court within sixty days. (Stats. 1903, p. 223, sec. 2, as amended 1905, p. 357.)

If one-fifth of the work is not done within one-half the time allowed, any other holder of a permit may petition the State Engineer for a cancellation of the permit of the other, subject to appeal to the district court. (Stats. 1903, p. 223, sec. 3.)

On completion of the work, proof of completion must be filed with the State Engineer on a form furnished by him, stating a given list of facts, and if to carry over fifty cubic feet per second, must be certified to by a well-known and competent irrigation engineer. This proof is published for four weeks in a newspaper, at the expense of the person making the proof. The State Engineer may require further matters in proof of completion (Stats. 1903, p. 223, sec. 4), and must make a full inspection of the works and render a report. He then issues a certificate setting forth certain enumerated details concerning the work. (Stats. 1903, p. 223, sec. 5.) Any person aggrieved by his determination may appeal to the courts. (Stats. 1903, p. 223, sec. 6.)

Following completion, proof must be made within four years of the actual application and use of the water. A notice in writing, stating enumerated details, upon forms furnished by the State Engineer, is published for four weeks. After an inspection of the works, and submission of written proof of use, the State Engineer, if satisfied, issues a license confirming such use, bearing the date of the original application for, and the number of,

the permit, and stating other details. (Stats. 1903, p. 223, sec. 8.) Protests against such proof of beneficial application may be filed with the State Engineer. *(Ibid.*, sec. 12.) Any person aggrieved by the issuance or refusal of a license may appeal to the courts. *(Ibid.*, sec. 12.)

Relation.—Priority of right dates from the original application for permit to construct the works (Stats. 1903, p. 223, sec. 8), the licenses and permits being consecutively numbered. (*Ibid.*)

Priority on any enlargement, extension, or grant of extra time for completion, dates from the application for permit to make such enlargement, extension, or to have extra time. (Stats. 1903, p. 223, secs. 5, 8.)

Change of place of use may be made upon application to the State Engineer, stating enumerated details, and therewith a plat if required by him. If no one is injured by the change, the State Engineer issues a certificate authorizing the transfer. (*Ibid.*)

Measurement of Water.—No one shall be authorized to divert for irrigation purposes more than one cubic foot per second for each fifty acres unless it is shown to the satisfaction of the State Engineer that more is needed. (Laws 1903, p. 223, sec. 1, as amended 1905, p. 357.) For irrigation no license must exceed one second-foot for each fifty acres, unless the State Engineer or court is convinced that more is necessary; and the right to use water shall always be subject to local or community customs, rules and regulations adopted by a majority of the users from a common source of supply. (Stats. 1903, p. 223, sec. 9, as amended 1905, p. 174.)

Preferences and Pro-rating are provided for in the Idaho Constitution, art. XV, sec. 3.

Fees of State Engineer.—For filing application to appropriate, one dollar for the first cubic foot to be appropriated, and ten cents for each additional cubic foot. (Stats. 1903, p. 223, sec. 1, as amended 1905, p. 357.)

For certificate of completion, five dollars for a capacity of ten cubic feet per second or less, and thirty cents for each second-foot additional. (Stats. 1903, p. 223, sec. 10.)

For examination at proof of final use of water, two dollars for each forty acres of land irrigated, and if for other use than irrigation, five dollars. (*Ibid.*)

Certified copies of any papers twenty cents per folio. (*Ibid.*)

For certificate of change of place of use, two dollars. (*Ibid.*, sec. 11, as amended 1905, p. 27.)

KANSAS.

The statutes of Kansas resemble the Civil Code of California, though with variations and additions. (Gen. Stats. 1901, secs. 3609-3613.) Provisions for irrigation districts are found in General Statutes of 1901, section 3683 et seq. The court has very recently followed the California system, recognizing the common law of riparian rights side by side with appropriation. (See text.)

MONTANA.

The law of Montana is modeled upon the Civil Code of California (Mont. Civ. Code, 1895, secs. 1880-92, amended Stats. 1901, p. 152.) The courts uphold the California system, recognizing the common law of riparian rights. (See text.)

The Statute of 1905, page 184, chapter 90, provides that the governor is authorized to appoint an Irrigation Code Commission to meet February 15, 1906, and prepare a revised Irrigation Code adapted to the needs of Montana; and to publish a draft of the same before May 1, 1906.

The Statute of 1905, page 80, chapter 44, is an act to authorize appropriations of water by the United States Reclamation Service.

NEBRASKA.

References are to Compiled Statutes (1903); and amendments in the Session Laws of 1905.

Declaration of State Ownership.—The water of every natural stream not heretofore appropriated is declared the property of the public. (Comp. Stats. 6450.)

Concerning Riparian Rights.—Riparian rights are not mentioned but Compiled Statutes, 6451, provides: "The right to divert unappropriated waters of every natural stream for beneficial use shall never be denied." The courts protect riparian rights nevertheless. In the able opinion of Judge Holcomb in the case of Crawford County v. Hathaway (Neb.), 93 N. W. 781, decided by the supreme court of Nebraska, it is said: "The two doctrines stand side by side. They do not necessarily overthrow each other, but one supplements the other. The riparian owner acquires title to his usufructuary interest in the water when he appropriates the land to which it is an incident, and when the right is once vested it cannot be devested except by some established rule of law. The appropriator acquires title by appropriation and application to some beneficial use and of which he cannot be deprived except in some of the modes prescribed by law. The time when either right accrues must determine the superiority of title as between conflicting claimants." It seems that the legislature of the State of Nebraska had in 1899 abrogated the common-law rule of riparian ownership in water, and substituted therefor the doctrine of prior appropriation; but it was held in the case cited that the act could not, and did not, have the effect

of abolishing riparian rights which had already accrued, but only of preventing the acquisition of such rights in the future. The court follows the California doctrine enforcing the common law of riparian rights.

Preferences and Pro-rating.—In times of deficiency, domestic use supplied first; next agricultural uses. (Comp. Stats. 6451.)

Administration.—Water for the purpose of irrigation is declared "to be a natural want" (Comp. Stats. 6473), and the works therefor are declared works of internal improvement. (Comp. Stats. 6456.)

The general control vests in a Board of Irrigation, consisting of the Governor, Attorney General, and Commissioner of Public Lands. (Comp. Stats. 6412.) They appoint a secretary who shall measure all streams and gather *data,* etc. (Comp. Stats. 6425.) The State is divided into two water divisions (Comp. Stats. 6409), and the control of each division rests in an under-secretary appointed for each by the State board. (Comp. Stats. 6419 et seq.) Within the divisions, the State board may, as necessity arises, create water districts, the control of which rests with an under-assistant for each district. (Comp. Stats. 6441, 6442.) The immediate duty of administering the water supply rests with these under-assistants, who may administer priorities, shut off water, make arrests, etc. (Comp. Stats. 6443.) Owners must maintain headgates and measuring devices for this purpose, and if they disobey or obstruct the officials, are punishable criminally. (Comp. Stats. 6443, 6445.)

Determination of Existing Priorities.—Priorities existing at the time of the passage of the act are to be determined

as the Board of Irrigation shall determine. (Comp. Stats. 6424.) Priorities are to be recorded, when determined, in the office of the State board (Comp. Stats. 6427), and a certificate to be issued to appropriators. (Comp. Stats. 6429.) Appeal lies to court. (Comp. Stats. 6430 et seq.)

The rules adopted by the State Board of Irrigation in Nebraska provide that there shall be, on ten days' notice, a hearing, presided over by the secretary of the board, to receive testimony. Claimants may appear in person or by attorney, or may file claim affidavits, in which case they need not appear further. The record in the case of each claim consists of the original notice filed with the county clerk, a verified claim affidavit, any additional testimony offered, points of law, etc., submitted in writing, and the decision of the secretary. A failure to make claim constitutes an abandonment of such claim. Further rules are adopted to cover practice in matters of contest and to cover appeals.

Method of Appropriating.—Before commencing work, application must be made to the State Board of Irrigation on a form furnished by them. This must set forth the source, amount, location of works, time required, time when actual application of the water will be made ("which time shall be limited to that required for the completion of the work when prosecuted with diligence"), purpose, and if for irrigation, the land to be irrigated; also further details as board may require. If approved (the application may be amended or cut down by the board, subject to appeal to court), the application is indorsed approved, the approval recorded and the application is returned to the applicant, who may then go ahead. (Comp. Stats. 6436.) He must file a *map* with the board and begin work within six months. (Comp.

Stats. 6437, 6470.) A failure of diligence in the work results in forfeiture of the right. (Comp. Stats. 6470.) "When the application has been perfected" the State board issues a *certificate* which is recorded with the county clerk. (Comp. Stats. 6438.)

A similar procedure is provided for making changes later. (Comp. Stats. 6436.)

Relation.—Priority dates from the filing of the application. (Comp. Stats. 6439.)

Reservoirs.—Dams over ten feet high require approval of State board. (Comp. Stats. 6447, 6464.)

Measurement of Water.—No allotment for irrigation shall exceed one cubic foot per second for each seventy acres. (Comp. Stats. 6428.) One cubic foot per second is the standard measurement, except where the miner's inch is already in use, and fifty miner's inches are declared equal to one cubic foot per second. (Comp. Stats. 6440.)

Fees (Payable to State Treasurer in Advance).—Statute of 1905, c. 167, p. 652. For filing, etc., applications to appropriate, $2.00.

For copies of maps, etc., 40c. per hour taken in copying, etc.

For recording any other papers, $1.00 for first 100 words; and 15c. for each additional folio.

For certified copies of any paper, 15c. per folio for making the copy, and $1.00 for certificate thereto.

Crimes.—Wasting artesian well water is subject to a fine. (Comp. Stats. 6407.) Disobeying officials is a misdemeanor. (Comp. Stats. 6407.) Damaging works or stealing water is a crime (Comp. Stats. 6458), and numerous other police regulations. The law of appro-

priation declared applicable to State lands. (Comp. Stats. 6448.)

Irrigation Districts.—Irrigation districts based on Wright Act of California. (Comp. Stats. 6476 et seq.) Irrigation districts based upon the Wright Act of California are provided for in Cobbey's Annotated Nebraska Statutes, section 6825 et seq., amended in Statutes of 1905, page 649. The laws of Nebraska concerning irrigation districts, based upon the Wright Act of California, were amended in the Laws of Nebraska of 1905, page 648 et seq., chapters 165, 166.

Ditches for utilizing waste, seepage, swamp or spring waters governed by the same laws as ditches using waters of natural streams. (Comp. Stats., 6452.)

NEVADA.

Nevada is reconstructing her laws concerning water in order to advance irrigation. The law of appropriation was originally established in Nevada, and the law of riparian rights rejected *in toto,* by the decisions of the courts independent of legislation (*ante*), and this is the basis of Nevada's present laws; but a thorough systematizing of detail is being provided which is entirely absent in California. Water is scarce—even rare—in Nevada. The lands are susceptible of excellent culture where water can be had, but Nevada is mostly a series of dry, waterless deserts separated by bare mountains. Hitherto the mountain ranges with their great mines have furnished the paramount industry in Nevada, but now the energies of the State are turning to the development of the valleys by means of irrigation. Everything is being done to aid the National Government in its plans under the act of Congress of June 17, 1902 (*ante*), and the work of building irrigation systems is proceeding on a large scale.

References are to the Compiled Laws of 1900, section 354 et seq.; Session Laws of 1901 (page 72), 1903 (page 18), 1905 (pages 66, 93, 193, 197). There is nothing in the State constitution.

Declaration of State Ownership.—"All natural watercourses and natural lakes and the waters thereof which are not held in private ownership belong to the State, and are subject to regulation and control by the State." (Comp. Laws, 1900, sec. 354.) All waters not held in private ownership are declared (by Stats. 1903, p. 24,

sec. 1) to "belong to the public," and the use thereof is a public use.

Concerning Riparian Rights.—The right to waters can arise only by the method prescribed in the statutes, which is the method of appropriation. (Comp. Laws 1900, sec. 359.) Riparian rights are not expressly mentioned in any of the statutes. The statute of 1903, page 24, section 1, provides "beneficial use shall be the basis, the measure, and the limit of the right," a common phrase in the States rejecting the California doctrine, of which Nevada is one.

The court follows the Colorado system rejecting riparian rights *in toto*.

Administration.—There is a State Board of Irrigation, consisting of the Governor, Surveyor General, and Attorney General of Nevada. (Stats. 1901, p. 72.) This board shall sub-divide the State into water subdivisions, and appoint water commissioners, whose duty shall be to administer and apportion the water according to priority (as below determined). The Board of Irrigation shall make such rules and fix such penalties as it shall seem advisable. (Stats. 1903, p. 18; Stats. 1905, p. 66.) The State Engineer is in effect given power of keeping a general lookout over all waters in the State. (Stats. 1903, p. 18, sec. 5.) Any person obstructing the officials in these matters is guilty of a misdemeanor. (Stats. 1903, p. 18, sec. 20. See, also, Comp. Laws 1900, secs. 361-373, possibly repealed by Stats. 1903, p. 18.)

Determination of Existing Priorities.—The State Engineer shall prepare for each stream in the State of Nevada a

list of existing appropriations according to priority. For this purpose he shall send blanks to existing claimants to be filled out and sworn to and existing decrees of courts shall be collected. An examination shall be made and record and maps prepared by the State Engineer, who shall prepare from these *data* a list of priorities and issue certificates of priority. The list shall be recorded with the county recorder. Parties aggrieved may bring an action against the State Engineer in court. From the recorded list the water commissioners shall administer the water. (Stats. 1903, p. 18.) Priority of appropriations hereafter made are determined at the start. (*Infra.*)

Method of Appropriating.—(Statute of 1905, p. 66.) Application must be made to State Engineer, containing details of plan, etc., and any additional facts required by the State Engineer, in a form prescribed by him, and he shall record date of filing with him. In some newspaper, if the application is satisfactory, the State Engineer publishes a *notice* of the application "showing by whom made, the quantity of water sought to be appropriated; the stream from which the appropriation is to be made and at what point on the stream; the use for which it is to be appropriated, and by what means, which notice shall be published once a week for four weeks." Within thirty days after completion of publication written protest may be filed with State Engineer, who may take such action as he deems proper. If the application is approved by him, he shall return it indorsed to applicant, amended or cut down if necessary (subject to suit against him in court within sixty days after the indorsement.) The appropriator must then file a map with the State Engineer. "Upon proof to State Engineer that any application to appropriate

water has been perfected in accordance with this act, said State Engineer shall issue to the applicant a certificate setting forth the name of the appropriator, date, source, purpose and amount of the appropriation and if for irrigation, a description of the land to be irrigated, which certificate shall within thirty days after its issuance be recorded in the county in which the point of diversion of the appropriation is, as well as in the county where the water is used, in books especially kept for that purpose, and the fee for such records shall be one dollar, payable by the party in whose favor the certificate is issued."

Relation.—The *priority* of such appropriation shall *date from the filing* of the application in the State Engineer's office. (See Comp. Laws 1900, secs. 425-429, possibly repealed by Stats. 1903, p. 18.)

All appropriations for irrigation are appurtenant to the land irrigated and can be separated therefrom only by becoming appurtenant to other land for irrigation by transfer after approval of the State Engineer and publication of notice, subject to review in the district court. (Stats. 1905, p. 66.)

Measurement of Water.—The maximum used to irrigate one acre was fixed at three acre-feet per year in the Statutes of 1903, p. 18; but this was repealed in the Statutes of 1905, p. 66. The standard of measurement is one cubic foot per second. (Comp. Laws 1900, sec. 360.)

General provisions similar to California Civil Code, 1410-1422, are contained in Compiled Laws, sections 356-358 and 424. State lands are made subordinate to

irrigation plans of the United States. (Stats. 1905, p. 93.)

Crimes.—Pollution of streams with substances injurious to health of persons, fish, or livestock, made a misdemeanor. (Stats. 1903, p. 214.) Interfering with State Engineer is a misdemeanor. (Stats. 1903, p. 18, sec. 20.) Diverting water to waste it is a misdemeanor. (Comp. Laws 1900, secs. 430, 431.) Willfully obstructing flow of stream is a misdemeanor. (Comp. Laws 1900, secs. 432-434.) Throwing sawdust into stream is a misdemeanor even though the stream is not wholly within the State. (Comp. Laws, secs. 4879, 4881, and numerous other police regulations.)

Irrigation Districts.—Irrigation districts based on Wright Act of California *(ante)* exist in Compiled Laws of 1900, sections 374-423.

Co-operation with the irrigation plans of the United States in general is provided for in Statutes of 1901, page 72, and Statutes of 1903, page 18. (Stats. 1905, pp. 66, 93, 197.)

In the proceedings of the Nevada Academy of Sciences, volume 1, No. 1, at a meeting held May 31, 1904, Mr. Albert E. Chandler, State Engineer, gave a discussion of the new statutory system in Nevada. The following extracts may be presented here:

"The important provisions of the bill are:

"1st. All natural watercourses and natural lakes, not in private ownership, belong to the public, and are subject to appropriation for beneficial use.

"2d. The right to the use of water so appropriated for irrigation shall be appurtenant to the land irrigated, and beneficial use shall be the basis, the measure, and the limit of the right.

"3d. The maximum quantity of water which may be used for irrigation purposes shall not exceed three acre-feet per year for each acre of land irrigated.

"4th. The office of State Engineer is created.

"5th. The State Engineer shall co-operate with the Secretary of the Interior in all work of construction, operation, maintenance, and management of irrigation works constructed by the Secretary of the

Interior in and for the benefit of Nevada, and shall in every way facilitate the work of the Secretary of the Interior in carrying out the provisions of the 'Reclamation Act' in Nevada.

"6th. The State Engineer shall prepare for each stream a list of appropriations of water according to priority.

"7th. The State Board of Irrigation shall divide the State of Nevada into water districts, and may appoint water commissioners to divide the water according to the determination of priorities in each district."

"The first step to be taken by the State Engineer in the determination of water rights is a careful survey of the irrigated land. Such a survey will soon be finished of the entire upper Carson Valley in Nevada. The maps show in detail the location of the ditches and the acreage and the kind of crops. The exact position of every five-foot contour has also been determined so that a new system of irrigating ditches can be easily planned when the government builds the reservoirs on the upper Carson. After the completion of the survey, testimony will be taken to show among other things the amount of land irrigated in each year since irrigation began. This last requirement caused some criticism at the time the bill was passed. It was contended that the first irrigators have passed away and that it would be very difficult to determine the date of the beginning of irrigation on some land. This criticism would seem to be but a strong argument for that particular requirement. The longer such testimony is deferred the more unattainable will it become, so it is well that provision is made for its record even at this late date. So important is this record, that several years ago the owners of ditches on the lower Walker River took the necessary steps to perpetuate testimony in regard to their ditches. These men were willing to put themselves to considerable expense to secure the record. The State now intends to do the work for all and at no cost to the farmer. In taking the testimony, or proof of appropriation as it is called, the State Engineer will personally visit every user of water. His maps and ditch measurements will be at the service of the farmer, so that the latter's inconvenience will be reduced to a minimum.

"When sufficient testimony is taken a list of the priorities will be made, and after this list has been prepared a certificate will be issued to each water user, setting forth, among other things, the priority number of appropriation, the amount of water appropriated, the amount of prior appropriations, and the legal subdivisions of land to which the water is to be applied.

"After the priority of water rights has been determined for an entire stream, commissioners will be appointed by the State Board of Irrigation whose duty it will be to divide water among the appropriators according to the priority of right and the amount to which each is entitled."

Nevada occupies a unique position in its treatment of the law of waters. It is now one of the staunchest supporters of the Colorado system, rejecting the common law of riparian rights and upholding the State property view and the law of appropriation as the sole rule governing waters. But formerly the court held the other way, and it was on the Nevada case of Van Sickle v. Haines, 7 Nev. 249, that the California court greatly relied in Lux v. Haggin, 69 Cal. 255, 10 Pac. 674, in establishing the California doctrine recognizing riparian rights. Nothing could be more vehement in support of the California doctrine than the opinion of Chief Justice Lewis in the Van Sickle case, wherein he said:

"Although it has sometimes been suggested that the unoccupied lands belong to the several States in which they may be located, the suggestion has never received the serious sanction of statesmen, or the courts of the country. . . . . If, as we have shown, the water naturally flowing through land is an incident or part of the land itself, whence the authority in a State court to hold that such incident does not attach to the land belonging to the United States? It might as well be argued, and indeed, it can be maintained with as much plausibility, that it has not the right to the growing timber upon it, which is not more a feature of the soil itself than a natural watercourse running through it. . . . .

"It might as well be said that the courts can deprive him of the land itself by holding that it did not pass by the patent, as to rule so respecting that which is universally admitted and held to be an inseparable and valuable incident to it. There is no rule of law that would not be more inapplicable to our condition than that which would simply justify judicial robbery."

Nevertheless the Nevada court, in Reno etc. Works v.

Stevenson, 20 Nev. 269, 19 Am. St. Rep. 364, 21 Pac. 317, 4 L. R. A. 60, declared that the common law of riparian rights was utterly unsuited to conditions in Nevada, and does not exist there (as quoted in the text). In a later case (Ronnow v. Delmue, 23 Nev. 29, 41 Pac. 1074) it was declared that "otherwise the right to the use of water would rest upon a very frail foundation." And in the most recent case upon the subject the court was very emphatic, saying:

"The doctrine of riparian rights is so unsuited to the conditions existing in the State of Nevada, and is so repugnant in its operation to the doctrine of appropriation, that it is not part of the law, and does not prevail here." (Walsh v. Wallace, 26 Nev. 299, 99 Am. St. Rep. 692, 67 Pac. 914.)

The Nevada court has been sharply criticised for this change of position (in Farnham on Waters, sec. 654) but it paved the way for the statutes above given.

NEW MEXICO.

References are to the Laws of 1905, page 270, chapter 102, and page 284, chapter 104. Previous to these statutes, the laws of New Mexico were, in this connection, contained in the Revised Statutes of 1903, chapter XLIV.

Declaration of State Ownership.—All waters are declared to belong to the public. (Sec. 1.)

Concerning Riparian Rights.—This statute (page 270) contains the usual provisions that no one shall be denied the right to appropriate (sec. 1); that beneficial use shall be the basis, the measure and the limit of all rights to the use of water (sec. 26); that priority gives the better right. (Sec. 2.) The courts follow the Colorado system, rejecting the common law of riparian rights *in toto*. (Cases cited in sec. 19 of text.)

Administration.—The office of territorial irrigation engineer is created with the usual duties and powers. (Sec. 11 et seq.) The statute divides the territory into six specified water divisions, with one water commissioner for each. (Sec. 23.) A Board of Control is established consisting of the territorial irrigation engineer and the water commissioners. (Sec. 24.)

Determination of Existing Priorities.—The determination rests with the Board of Control, subject to review in court. (Sec. 29.) The territorial irrigation engineer makes a survey after due notice, and takes all available testimony. (Sec. 29 et seq.) Provisions are made for contests. (Sec. 33 et seq.) The Board of Control is-

sues a certificate, one copy of which is recorded with the county clerk and the other in the office of the territorial irrigation engineer. (Sec. 36.)

Method of Appropriating.—A general method applicable to all pursuits is established (in chapter 104 of the Laws of 1905). This consists in filing notice in the office of the probate clerk of the county where the stream lies, and resembles more the original method as in force in California than it does the new method under the irrigation codes. The work must begin within six months after filing notice and be completed within eighteen months. (*Ibid.*) Application to the territorial engineer is not required except in cases of dams and dykes (sec. 19 of c. 102), and not even in those if the cost of the work is to be less than $2,000 (sec. 19), and even where required the territorial engineer has much discretion to waive requirements in favor of projects which he does not consider of great importance. (Sec. 19.) This would seem the only one of the recent statutes which keeps in view those who intend to appropriate water only on a small scale.

Measurement of Water.—The second-foot and the acre-foot are the units for time and volume respectively (sec. 3); and the miner's inch is declared equal to one-fiftieth of the second-foot. (Sec. 3.) The maximum allowed for irrigation shall be one second-foot for seventy acres irrigated. (Sec. 4.)

Miscellaneous.—Fees of the territorial engineer are to be fixed by the Board of Control. (Sec. 38.) Non-user for four years causes forfeiture of right. (Sec. 5.) An unusual provision is that waterworks for private use are exempt from taxation. (Sec. 8.)

NORTH DAKOTA.

The legislation in North Dakota was formerly modeled upon the Civil Code of California (Stats. 1901, p. 268). The courts follow the California doctrine upholding riparian rights.

In the session of the legislature of 1905, a statute was adopted after discussion in the North Dakota Irrigation Congress. This statute is Senate bill No. 1, entitled "North Dakota Irrigation Code."

Declaration of State Ownership.—All waters from all sources belong to the public (sec. 1).

Concerning Riparian Rights.—All waters except navigable streams are subject to appropriation (sec. 1). Beneficial use shall be the basis, the measure and the limit of right; priority gives the better right (sec. 2).

Administration.—The use of water is a public use (sec. 3). The office of State Engineer is created with powers of general supervision over the State (sec. 5). He shall keep records (sec. 11), and make rules subject to modification by vote of the board of water commissioners (sec. 12). He shall make surveys of streams (sec. 14), and co-operate with the United States Reclamation Service (sec. 14); and may inspect the works of appropriators at any time (sec. 27).

The whole State is divided into four water divisions (sec. 37); with one commissioner for each division (sec. 38); commissioner having general control over the waters within his division (sec. 39); the divisions may be sub-divided by the State Engineer into water districts (sec. 42), with one water master for each district,

and he shall have immediate charge of the waters (sec. 43). A board of water commissioners is established, consisting of the water commissioners and the State Engineer, and this board has general supervision over the whole State (sec. 40).

Police regulations consist in such provisions as that use of unsafe works is a misdemeanor (sec. 28); the failure to maintain a measuring device, likewise (sec. 52); interference with officials (sec. 53); or any acts in general which contravene the statute (sec. 54). These are all misdemeanors and the penalty therefor is provided in section 57.

Determination of Existing Priorities.—On completion of the survey of any stream system the State Engineer delivers the data to the Attorney General. Suit is brought by the Attorney General within sixty days, unless already begun by private parties, in which case the Attorney General may intervene on behalf of the State (sec. 13). All claimants are made parties and bear the cost between them (sec. 16). A referee may be appointed to take the evidence (sec. 33). A decree is rendered, and two certified copies thereof are given to the appropriator, who files one with the State Engineer and the other in the office of the water commissioner of the division in which the stream lies (sec. 19).

Method of Appropriating.—Before commencing work, application must be made to the State Engineer on a form prescribed by him, with any maps he may demand. Additional information may be required by him concerning works that are to exceed five hundred cubic feet per second, or concerning dams over thirty feet in height (sec. 19). An examination of the application, corrections thereof and refiling, follow (sec. 20). Notice is then published once a week for four weeks and

proof of publication made (sec. 22). If approved, the approval is indorsed upon the application, which constitutes a permit (sec. 22). From the refusal of the State Engineer to approve the application, appeal lies to court if taken within sixty days (sec. 23).

Prosecution of the work must continue with diligence (secs. 2 and 24). One-fifth of the work must be completed in one-half the time allowed (sec. 24); and the completion must be within five years (secs. 20, 22), unless the time is extended (not over three years) by the State Engineer (secs. 24, 30). A notice of completion is filed with the State Engineer, who makes an inspection (sec. 25), and issues a certificate of completion (sec. 26). Actual application of the water to beneficial use must follow within four years (sec. 22), unless the time is extended by the State Engineer for a time not over two years (sec. 30). Notice is given to the State Engineer of the actual application, and he makes an inspection and issues the final certificate, which is called a license (sec. 29).

A change in the point of diversion may be made only with the approval of the State Engineer (sec. 23).

Relation.—The right relates back to date of filing application in the office of the State Engineer (sec. 2).

Measurement of Water.—The second-foot and the acre-foot are the standards of measurement for time and volume respectively (sec. 47). The miner's inch is declared equal to one-fiftieth of a second-foot (sec. 47). The maximum allowed for irrigation shall not exceed one second-foot for each eighty acres irrigated (sec. 49.)

Fees of State Engineer are provided for in section 10.

Miscellaneous.—Canal companies are trustees for consumers (sec. 19). Non-user for three years causes loss

of right (sec. 48). Provisions concerning change of purposes of use are provided for in section 51. Concerning seepage water, section 49; concerning State lands, section 60.

A transfer of the water right for use on different lands may be made only on application to the State Engineer and publication of notice (sec. 50).

The assignments of water rights or of permits must be recorded in the office of the State Engineer (sec. 31).

OKLAHOMA.

References are to the Laws of 1905, page 274, chapter 21. The law previous to the passage of this act is contained in Revised Statutes of 1903, chapter 44.

Concerning Riparian Rights.—The act contains, in section 1, provisions similar to those of South Dakota, given at page 373, below.

Administration.—Use of water is declared a public use. (Sec. 2.) The office of the territorial engineer is mentioned throughout the act; but no such office was created, and the duties of the territorial engineer are to be performed by the secretary of the Board of Agriculture for the present. (Sec. 54.)

The powers and duties of the territorial engineer are similar to those contained in the South Dakota act of this same year, outlined on page 373, below. The territorial engineer has the power to sub-divide the territory into water districts, appointing a water master for each district. (Sec. 32 et seq.) For obstructing the officials or failure to maintain the proper devices the usual punishments are specified (in sec. 43).

Adjustment of Existing Priorities.—The territorial engineer, having made a complete survey of a stream (secs. 4, 6), furnishes the results to the attorney general, who, within sixty days, brings suit, unless suit is already brought by private parties. (Sec. 5.) A referee may be appointed by the court. (Sec. 23.) A decree stating specified details is filed with the territorial engineer and also recorded in the county where the stream lies. (Sec. 8.)

Method of Appropriating.—Before commencing work, an application for a permit must be made to the territorial engineer in the usual way. (Sec. 10.) Notice thereof is published (sec. 11); and the approval indorsed thereon. (Sec. 12.) Beginning work without permit from the territorial engineer is a misdemeanor. (Sec. 40.) The work must be prosecuted with diligence (sec. 14), and one-fifth thereof must be completed in one-half the time specified for the completion thereof, which is five years (sec. 10), unless the territorial engineer specifies a shorter time (sec. 12), or a longer time, not exceeding three years additional. (Sec. 20.) Notice of completion being filed with the territorial engineer, he makes an inspection (secs. 15 and 17), and issues a certificate of completion. (Sec. 16.) Actual application and use of the water must be made within four years after completion, unless the territorial engineer specifies a shorter time, or a longer time not exceeding two years additional. (Sec. 20.) On or before the date set for actual application of the water to beneficial use, the territorial engineer makes an inspection, and if satisfactory, issues a license (sec. 19), which is the final certificate issued.

Relation.—The doctrine of relation is preserved (in sections 1 and 10), the priority of right relating back to the original application for permit.

Measurement of Water.—The second-foot and the acre-foot are the units of time and flow respectively. (Sec. 27.) One second-foot for seventy acres is the maximum allowed for irrigation. (Sec. 29.)

Miscellaneous.—Fees of the territorial engineer are provided for in section 53. All liens provided for in this act shall be superior in right to all mortgages or other encumbrances hereafter. (Sec. 44.) The water right is

appurtenant to the land (secs. 1, 21), and transfer thereof is restricted and can be made only upon application to the state engineer and publication of notice. (Secs. 21, 30.) Provisions concerning water or canal companies are contained in sections 9, 25. Non-user for two years causes forfeiture. (Sec. 28.)

OREGON.

Originally the Statutes of Oregon (Hill's Annotated Laws 1892, page 1930, sections 1-9) had been modeled upon the Civil Code of California. In the Laws of 1899, page 172, a more enlarged treatment was given the subject, but still resembling the California code (Amended Statutes of 1901, page 136; 1903 (special session), page 25.) But in 1905, page 401, a new statute was passed modeled rather upon the recent statutes of the arid States. The courts of Oregon uphold the California system, recognizing the common law of riparian rights. (See text.)

The Oregon Statute of 1905 is in part as follows:

"Section 1. *Appropriation of Water.* Any person, association, or corporation hereafter intending to acquire the right to the beneficial use of any waters for the reclamation of arid lands, shall post in a conspicuous place at the proposed point of diversion a written or printed notice containing the name of such applicant and the stream or other source of supply of such water, a brief description of the point of diversion and the nature of the beneficial use to which such waters are to be applied, and the exact date of posting, and shall within fifteen days thereafter file in the office of the clerk of the county in which such notice is posted, a duplicate thereof so attested, and shall within thirty days thereafter file in the office of the State Engineer a certified copy of such duplicate as filed in the office of the county clerk, which shall be accompanied by such information, maps, field-notes, plans and specifications as may be necessary to show the method of construction.

All such maps, field-notes, plans, and specifications shall be made from actual surveys and measurements, and shall be retained in the office of the State Engineer; *provided*, that appropriation of water by the United States shall be made as provided in section 2."

"Section 5. *Decrees Adjudicating Water Rights.* Upon the adjudication of the rights to the use of the water of a stream system, a certified copy of the decree shall be prepared by the clerk of the court, without charge, and filed in the office of the State Engineer. Such decree shall in every case declare, as to the water right adjudged to each party, whether riparian or by appropriation, the extent, the priority, amount, purpose, place of use, and, as to water used for irrigation, the specific tracts of land to which it shall be appurtenant, together with such other conditions as may be necessary to define the right and its priority.

"Section 6. *State Engineer, Appointment, Duties, Qualifications, and Salary.* A State Engineer, technically qualified and experienced as an hydraulic engineer, shall be appointed by the Governor upon the recommendation of the director of the United States geological survey and confirmed by the Senate. He shall hold office for the term of four years from and after his appointment, unless sooner removed by the Governor for cause, and until his successor shall have been elected and shall have qualified. He shall have general supervision of all the measurements and records of appropriation of waters of the State, and of all surveys and engineering work in which the State may be interested, and for which funds are provided, and shall perform all work in connection therewith."

"Section 9. *Fees of State Engineer.* The State Engineer shall receive the following fees, to be collected in advance, and to be paid by him into the general fund of

the State Treasury on the last day of March, June, September and December of each year:

"(*a*) For filing and recording notice of an appropriation of water, map and field-notes of the same, $5.00.

"(*b*) For blue print copy of any map, drawing, ten cents per square foot or fraction thereof. For other copies of drawings or any data furnished upon application, actual cost of work.

"(*c*) For certifying to such copies, $1.00 for each certificate.

"(*d*) For such work as may be required of his office, the fees provided by law."

SOUTH DAKOTA.

References are to the Statute of 1905, page 201, chapter 132. Previous to this statute, there had been little legislation upon the subject in South Dakota. The office of State Engineer existed. (Annotated Codes 1899, sec. 2802 et seq.) And there had been considerable legislation concerning waters obtained from artesian wells. (*Ibid.*, secs. 27, 54 et seq.) Previous to the Statute of 1905, the law of South Dakota in this connection was contained in Grantham's Annotated Statutes of 1899, section 2687 et seq.

Declaration of State Ownership.—All waters within the State are declared in section 1 to belong to the public.

Concerning Riparian Rights.—This South Dakota statute contains the usual provisions to the effect that all waters within the State are subject to appropriation (sec. 1), and that beneficial use shall be the basis, the measure and the limit of all rights to the use of water (sec. 2), and that appropriation gives the better right. (Sec. 2.) The courts have in the past upheld the common law of riparian rights, following the California system. (See secs. 18 and 20, of text, *ante*.)

Administration.—The State Engineer is appointed (sec. 5) with general duties and powers of supervision over the waters of the State, and to make surveys and collect all data available (secs. 5, 12, and 32). He may examine all works. (Sec. 27.) The office of assistant state engineer is likewise created. (Sec. 6.) Three water divisions are created by this statute (sec. 37), with one

water commissioner for each appointed by the governor. (Sec. 38.) The State Engineer and the water commissioners shall together form the Board of Water Commissioners and have general supervision and control over waters of the State, adopting rules and regulations, etc. (Sec. 40). The water divisions may be sub-divided into water districts by the State Engineer, as it becomes advisable. (Sec. 42.)

Police regulations exist in the usual way. Disobeying the orders of the State Engineer (sec. 28), or failure to maintain headgates and other devices (sec. 49), and similar matters, are made misdemeanors; and the penalties therefor are specified in section 54.

Determination of Existing Priorities.—The State Engineer is required to make a complete survey of the waters of the State (sec. 14), and to furnish the data collected to the attorney general, whose duty it then is to bring suit in the name of the State to determine the rights upon the stream, unless suit has already been begun by private parties. (Sec. 15.) The usual provisions for the conduct of the suit are provided, and the court may appoint a referee. (Sec. 33.) The decree must state certain specified details concerning the rights of all users of water on the stream, and one copy thereof must be filed in the office of the State Engineer, and the other copy with the water commissioner of the water division in which the stream lies. (Sec. 18.)

Method of Appropriating.—Before beginning work, application must be made to the State Engineer for a permit. (Sec. 19.) Beginning work without making such application is a misdemeanor. (Sec. 51.) The State Engineer will furnish blanks on which applications are to be made, and may require such general information as he

deems necessary. (Sec. 19.) Notice of application is published in a newspaper (sec. 21), and an examination is made by the State Engineer; if he approves he indorses his approval upon the application, which constitutes a permit to proceed. (Sec. 22.) If he rejects the application, an appeal lies therefrom. (Sec. 23.) The work must be prosecuted with diligence. (Sec. 24.) It must be completed within five years (sec. 20), but the State Engineer may specify a shorter time (sec. 22), or may extend the time three years. (Sec. 22 et seq.) One-fifth of the work must be completed in one-half the time specified by the State Engineer. (Sec. 24.) On completion of the work an examination is made by the State Engineer, and if all is satisfactory a certificate of completion issues. (Sec. 26.) Actual application and use of the water must follow within four years after the completion of the work (sec. 22), unless the State Engineer specifies a shorter time, or a longer time not exceeding two years additional. (Sec. 22 et seq.) Upon notice and examination of the actual use of the water at the end of the time specified, a license issues, which is the final certificate. (Sec. 29.)

Relation.—The priority of right dates from the time of filing original application. (Secs. 2, 20.)

Measurement of Water.—The second-foot is the unit of measurement by time and the acre-foot by volume, and the miner's inch is declared equivalent to one-fiftieth of a second-foot. (Sec. 44.) If the appropriation is for irrigation, the maximum allowed shall be one second-foot for each seventy acres irrigated. (Sec. 46.)

Miscellaneous.—Fees of the State Engineer similar to those of the other States are specified in section 9.

Section 55 provides as follows: "All liens on the land provided for in this act, shall be superior in right to all

mortgages or other encumbrances placed upon the land and the water appurtenant thereto, or used in connection therewith, after the passage of this act."

Provisions concerning canal companies or those who furnish water to others, are contained in sections 19 and 35. The water right is appurtenant to the land where it is used, and can be transferred only under the restrictions of application to the State Engineer and publication of notice in a newspaper. (Secs. 31, 47.) Non-user for two years is ground for forfeiture of right. (Sec. 45.)

TEXAS.

Waters "are hereby declared to be the property of the public, and may be acquired by appropriation for the uses and purposes hereinafter provided." (Sayles' Civil Stats. 1900, art. 3115 et seq.) To some extent the courts of Texas follow the California system, recognizing the common law of riparian rights. (See text.)

UTAH.

References are to Laws of 1905, chapter 108. This was substituted in 1905 for the Statute of 1903, chapter 100; but in most respects the two are identical. The law previously had (in Rev. Stats. 1898, secs. 1261-1275) been modeled after the Civil Code of California.

Declaration of State Ownership.—"The water of all streams and other sources in this State, whether flowing above or under ground, in known or defined channels, is hereby declared to be the property of the public, subject to all existing rights to the use thereof." (Sec. 47.)

Concerning Riparian Rights.—"Rights to the use of any of the unappropriated water in the State may be acquired by appropriation, in the manner herein provided, and not otherwise." (Sec. 34.) The courts follow the Colorado system rejecting riparian rights *in toto.* (See text.) "Beneficial use shall be the basis, the measure and the limit of all rights to the use of water in this State." (Sec. 49.)

Administration.—The use of water for beneficial purposes is a public use. (Sec. 50.) The State Engineer, appointed for four years by the governor, has general supervision of the waters of the State, their measurement, apportionment, appropriation, and general supervision over all division superintendents and district supervisors, making rules and regulations, and publishing biennial reports including recommendations upon changes in the law, etc. (Secs. 1, 3.) He, as necessity arises, shall divide the whole State into water divisions designating

them by name, with a superintendent for each, and subdivide the divisions into districts designating them by numbers, with a supervisor for each. The superintendents are appointed by the State Engineer, and have general control over the division, while the supervisors are appointed by the counties in which they serve, and apportion the water among its ditches according to determined priorities, and keep general control over the district. Appeal lies from these officers to the State Engineer. (Secs. 26-30.) The owners must maintain headgates and measuring devices within thirty days after request from the State Engineer, or are guilty of a misdemeanor. (Sec. 55.) Destroying or interfering with such appliances or obstructing the officials is a misdemeanor. (Sec. 64.)

Determination of Existing Priorities.—The State Engineer must make a complete survey of each river system or water source of the State, beginning with those most used for irrigation, and collect all data that will aid in adjusting existing priorities. (Sec. 6.) He must publish a notice in a newspaper for fifteen days before commencing in any system.

On completion of his survey, he files a written statement with the clerk of the district court of the county in which the stream is situated, and if situated in more than one county, then in the most convenient one, whereupon said district court shall have exclusive jurisdiction to determine all water rights on said river or water source. (Sec. 11.) Within thirty days after the filing of this statement the clerk of the court publishes notice once a week for three successive months, requiring all claimants to file claims within six months. The clerk also mails a copy of this notice to each claimant, inclosing a form for statement of claim. This is filled

out and verified by the oath of claimant. The State Engineer must tabulate these claims, and file this tabulation with the clerk of the district court and with the county recorder of each county in which the water is situated. (Sec. 13.) Failure to file claim within the six months is a complete bar, unless the claimant did not receive actual notice, in which case the court may extend the time to one year, the court publishing notice of the request for extension. (Sec. 14.)

At the end of the six months the court may appoint a referee, or may determine priorities without a referee. (Secs. 15, 17.) The statements filed by claimants stand in the place of pleadings, and the State Engineer furnishes the referee or court with the data he has collected. (Sec. 17.) Testimony may be taken at such places as advisable, giving notice to claimants as each claim comes up. (Sec. 18.) Any interested party may file a contest. (Sec. 19.)

The decree is rendered by the court upon the findings of the referee, if satisfactory to the court, subject to appeal to the supreme court, if taken within six months. (Secs. 21, 22, 23.) This decree sets forth "the name and postoffice address of the person, corporation or association entitled to the use of the water; the quantity of water in acre-feet, or the flow of water in second-feet to be used; the purpose for which the water is to be used each year; the name of the stream or other source from which the water is diverted; the priority number of the right; the date of the right, and such other matters as will fully and completely define the right of said person, corporation or association to the use of the water." (Sec. 22.)

A certificate is then issued in duplicate to each owner containing the facts stated in the decree. One copy is to be recorded within thirty days with the county re-

corder of the county where the diversion is made, and the other is to be filed with State Engineer. (Sec. 24.)

Method of Appropriating.—Before commencing or enlarging any work, written application must be made to the State Engineer on a form furnished by him, setting forth the name and postoffice address of applicant, the purpose of use, quantity to be used, time of use, name of stream, point of diversion, nature and description of diverting works in detail, and such other facts as will clearly define the full purpose of the proposed appropriation. (Sec. 35.) If for irrigating, must also show and describe what land is to be irrigated. If for power, the nature and description of the proposed equipment, and the place where the water is to be returned to the natural stream. If for mining, the name and kind of mine and the place where the water is to be returned. (*Ibid.*)

The date of receipt of the application is indorsed thereon by the State Engineer, who may require the application to be corrected. (Sec. 36.) The State Engineer publishes notice of the application in a newspaper within the boundaries of the river system or water source where the appropriation is to be made, for thirty (30) days. Protests may, within thirty days after final publication, be filed with him. (Secs. 37, 38.) He may require additional information, such as particulars concerning the corporation, if the applicant is a corporation. (Sec. 41.)

Approval or disapproval is indorsed by the State Engineer upon the application. (Sec. 40.) If approved, the applicant may proceed with the work (sec. 40), beginning within six months after approval and, unless otherwise prescribed by the State Engineer, completing the work within five years. (Sec. 42.) Parties aggrieved by the approval of any application may bring suit

(against the applicant?). (Sec. 43.) Upon completion, a sworn description and proof of work must be filed with the State Engineer on a form furnished by him, attested by two witnesses, and accompanied by complete detailed maps, also certified, a failure to make such proof being a misdemeanor. (Sec. 44.)

A numbered certificate of appropriation in duplicate is issued to the appropriator by the State Engineer, when he is satisfied that the appropriation has been effected. This certificate sets forth the name and address of the appropriator, the amount of water, purpose for which used, time of use, name of stream, place of diversion, priority number, date of appropriation, and such other matters as will fully define the right. One copy to be filed with the State Engineer. The other copy is recorded by the appropriator with the recorder of the county where the water is diverted; and is his evidence of his right. (Sec. 45.)

A change in place of diversion may be made only on making a report to the State Engineer. (Sec. 53.)

Relation.—"The priority number of such appropriation shall be determined by the date of receiving the written application in the State Engineer's office." (Sec. 46.)

Reservoirs.—A special provision covers the building of dams (in sections 3 to 10). Duplicate plans, etc., for any dam over five feet in height across the natural channel of a running stream, or any other dam over ten feet, shall be submitted to the State Engineer for his approval; one copy to be returned with his approval or disapproval. Failure of persons to comply with this requirement is a misdemeanor. The work must be done under the supervision of the State Engineer.

Preferences and Pro-rating.—The prior appropriator shall always be supplied in full before a subsequent ap-

propriator gets any water, except in the annual low-water stage, when all users are on an equal footing, and pro-rate. In time of scarcity, domestic uses have preference over all other purposes, and agriculture over all except domestic use; those using for the same purpose maintaining priorities between themselves. (Sec. 56.)

Measurement of Water.—The standard unit of flow is one cubic foot per second; of volume, one acre-foot, equivalent to 43,560 cubic feet. (Sec. 48.)

Schedule of State Engineer's Fees.—Approval of plans for dam, $1 for each foot in height.
Inspection of dam site, $10 per day and expenses.
Inspection of any works by request, the same.
Filing application to appropriate, $2.50.
On proof of appropriation, $5.00.
Recording completed applications, $2.50.
Certificates of appropriation, $1.00.
Filing notices of protest, $2.50.
Filing any other paper, $1.00.
Certified copy of any paper, per folio, 20c.
Blue-print of any map, etc., 10c. per square foot.
Certificate to copy of paper or map, etc., 50c.

Irrigation Districts.—Concerning irrigation districts based on the Wright Act of California, see Revised Statutes of 1898, section 1287 et seq. (since repealed), and Statute of 1905, c. 108, sec. 71.

Utah Irrigation Code.

The Utah Irrigation Code is here given in full as an instance of the recent type of legislation, of which it is a good example.

(1905 Laws of Utah, c. 108, p. 145.)

WATER RIGHTS AND IRRIGATION.

An Act codifying and revising certain laws providing for determining and recording water rights; regulating the diversion, use and apportionment of water; prescribing the manner in which water may be appropriated; providing for the appointment of a State Engineer and prescribing his qualifications, powers, duties and compensation; requiring claimants to the use of water to file statement of their claims, and declaring the forfeiture of rights for failure to file such statements; providing for the taking of testimony and the entering of decrees determining rights to the use of water and permitting appeals; requiring certificates of water rights to be issued, filed and recorded; directing that the State shall be divided into water divisions and districts, and that superintendents and supervisors shall be appointed to apportion the water; requiring the applications for the apportionment of water to be filed, and permitting the construction of diverting works; providing for the issuance and recording of certificates of appropriation; declaring water to be public property, subject to existing rights; fixing units of measurement of water; establishing basis, measure and limit of right; providing for the abandonment of use, change in manner or place of use, and commingling and recovery of water; defining rights of appropriators, permitting irrigation companies to take stock in similar companies; providing for the acquisition of rights of way, and the use and enlargement of existing canals; directing that canals, bridges and crossings be kept in repair; declaring when water rights are appurtenant to land, and how transfers are to be made and recorded; fixing penalties for violations of this act; providing legal advisers for State Engineer; establishing fees and prescribing how they shall be collected and paid to the State; providing for the payment of fees, costs and expenses under this act; prescribing who may be parties in actions concerning water, preserving the existence and providing for the dissolution of irrigation districts; repealing chapter 100, laws of Utah 1903, and all other laws, and parts of laws in conflict with the provisions of this act; but preserving vested rights to the use of water, and providing that any right initiated under the laws repealed by this act or by said chapter 100, may be completed and perfected; providing that water commissioners heretofore appointed shall continue to perform their duties until superseded by division superintendents and district supervisors, and that similar water commissioners may be appointed if necessary.

Be it enacted by the Legislature of the State of Utah:

Section 1. Office of State Engineer created. Powers and duties of. There shall be a State Engineer, who shall be appointed by the Governor of the State and be confirmed by the Senate. He shall hold his office

for the term of four years and until his successor shall have been appointed and qualified. He shall have general supervision of the waters of the State and of their measurement, apportionment and appropriation, and of all division superintendents and district supervisors. He shall have power to make and publish such rules and regulations as he may deem necessary from time to time, to fully carry out the provisions of this act and secure the equitable and fair apportionment of the water according to the respective rights of appropriators. No person shall be appointed to the office of State Engineer who has not such theoretical knowledge and practical experience and skill as shall fit him for the position.

Sec. 2. Salary and allowances. The State Engineer shall receive a salary of three thousand dollars per annum, payable in quarterly installments by the State Treasurer upon warrants drawn by the State Auditor. When the State Engineer is called away from his office on official business, he shall be entitled to his actual traveling expenses, which shall be paid out of any money appropriated for that purpose, on the certificate of said State Engineer, approved by the State Board of Examiners.

Sec. 3. Office at capital. The State Engineer shall keep his office at the State capital.

Sec. 4. Oath and bond. Before entering upon the duties of his office, the State Engineer shall take and subscribe an oath before some officer authorized by the laws of the State to administer oaths, to faithfully perform the duties of his office. He shall file with the Secretary of State said oath and his official bond in the penal sum of five thousand dollars, with not less than two sureties, to be approved by the State Board of Examiners, and conditioned for the faithful discharge of the duties of his office, and for the delivery to his successor or other officer appointed by the Governor to receive the same, all moneys, books and other property belonging to the State then in his hands or under his control, or with which he may be legally chargeable as such officer.

Sec. 5. Report to Governor. The State Engineer shall prepare and render to the Governor biennially, and oftener if required, full and true reports of his work relating to the matters and duties devolving upon him by virtue of his office, which biennial report shall be delivered to the Governor on or before the 31st day of December of the year preceding the regular session of the Legislature. He shall become conversant with the water ways of the State, and its needs as to irrigation matters, and in his reports to the Governor he shall make such suggestions as to the amendment of existing laws or the enactment of new laws as his information and experience shall suggest. He shall keep on file in his office full and proper records of his work, including all field notes, computations and facts made or collected by him, all of which shall be duly certified by him, and be part of the records of his office

and the property of the State. All records, maps and other papers recorded and filed in the office of the State Engineer shall be open to the public during business hours, and copies thereof, certified by said engineer, shall be furnished on payment of the fees provided for by this act.

Sec. 6. Duties of Engineer. May be co-operate with National Government. The State Engineer shall make a complete hydrographic survey of each river system and water source of the State, beginning such work upon those streams and sources which are most used for irrigation, and, from the data so obtained the State Engineer shall construct maps, which shall exhibit the essential facts relating to the supply, diversion and use of the water of each of such river system or water sources. He shall also collect such other facts as will, in his judgment, aid in ascertaining the existing rights to the use of the water and in determining the volume of the surplus or unappropriated water, if any, of each of such streams or sources. He shall have general supervision of the appropriation of all surplus or unappropriated water in the manner provided by law. Said surveys and collections of facts shall include the location of all suitable sites for dams and reservoirs, and a determination of the approximate capacity and cost of each. In doing such work, the State Engineer may co-operate with the agencies of the National Government, engaged in similar work within the State, for the purpose of interchanging information and avoiding the unnecessary duplication of work. The State Engineer shall have a seal which he shall affix to all certificates issued from his office.

Sec. 7. Notice to be given. Before commencing the hydrographic survey of any river system or water source, the State Engineer shall cause notice to be published in some newspaper having general circulation on said river system or water source, stating the time and place of beginning said survey, and said notice shall be published continuously in said newspaper for a period of not less than fifteen days immediately prior to the commencement of said work.

Sec. 8. Must examine plans of dams exceeding five feet in height, and inspect dams. Duplicate plans, drawings and specifications for any dam above five feet in height, across the natural channel of a running stream, or of any other dam intended to retain water above ten feet in height, shall be submitted to the State Engineer for his approval, who shall examine such plans, drawings and specifications, and, if he approves the same, he shall return one copy of each such plans, drawings and specifications, with his approval, to the party or parties submitting the same and file the other in his office. If the State Engineer disapproves any of such plans, drawings or specifications, he shall return the same, with his reasons for such disapproval. The State Engineer shall have authority to keep an inspector on any such dam during the construction thereof, and to see that the work is done in accordance

with the plans, drawings and specifications, and the State Engineer may require the parties constructing the same to make any additions or alterations during the construction which he considers necessary for the security of the work, the safety of persons or the protection of property. Any person, corporation or association beginning the construction of any such dam before the plans, drawings and specifications shall have been submitted to and approved by the State Engineer, or proceeding with such work in the absence of an inspector appointed by said engineer, or who shall fail to comply with any of the requirements made by him in pursuance of this section, shall be guilty of a misdemeanor.

Sec. 9. Dam or works examined, when. Should any person, corporation or association residing on or owning land in the neighborhood of any completed dam or diverting works, apply to the State Engineer in writing, requesting an examination of such dam or works, the State Engineer may order an examination thereof. Before doing so, he may require the applicant for such examination to deposit a sum of money sufficient to pay the expenses of the examination, and in case the application appears to him not to have been justified, he may cause the whole or part of such expense to be paid out of such deposit. In case the request appears to the State Engineer to have been justified, he may require the owner of the works to pay the whole or any part of the expenses of such examination.

Sec. 10. May inspect dams and require alteration. The State Engineer shall have authority to examine and inspect, during construction, any ditch or other diverting works, and, at the time of such inspection, he may order the parties constructing the same to make any addition or alteration which he considers necessary for the security of such works, the safety of persons or the protection of property. Any person refusing or neglecting to comply with such requirements of the State Engineer shall be guilty of a misdemeanor. But the provisions of sections 8, 9 and 10 shall not apply to works constructed by the National Government.

Sec. 11. On completion of survey, statement to be filed. When the State Engineer has completed the hydrographic survey of any river system or water source, he shall file a written statement with the clerk of the district court of the county in which the same is situated, or if the system or source extends into more than one county, the statement shall be filed in any county which embraces any part of such river system or water source that the State Engineer shall select as most convenient for the water users of the system or source. Said statement shall set forth the fact of the completion of such survey, the names and postoffice addresses of all persons, corporations and associations using water of said river system or water source, so far as the same are known to the State Engineer, and shall contain such other facts and information as he may deem necessary. On the filing of such statement,

the district court in the county where the same is filed shall have exclusive jurisdiction to determine all water rights on said river system or water source, in accordance with the provisions of this act.

Sec. 12. Notice to be given. Claimants to file statements. Within thirty days after the filing of the statement mentioned in the last preceding section, the clerk of the court in which the same shall be filed must give public notice that all persons claiming the right to the use of any water of said river system or water source must file a written statement with the clerk of said court, within six months after the first publication of said notice, setting forth their respective claims to the use of such water, which notice shall be published at least once a week for three successive months in some newspaper printed and published within the boundaries of said river system or water source and having a general circulation therein; or, if there be no such newspaper, then it shall be published in some newspaper printed and published in this State and having a general circulation on said river system or water source. The clerk of said court shall also mail, by registered letter, to each of the persons, corporations or associations whose names and addresses are given in such statement filed by the State Engineer, a copy of said notice, and a blank form on which said claimant shall present, in writing, as provided in the next succeeding section, all the particulars relating to the appropriation of the water of said river system or water source to which he lays claim.

Sec. 13. Application for water, how made. Each person, corporation or association claiming the right to use any water of said river system or water source, shall, within six months after the first publication of the notice provided for in the last preceding section, file in the office of the clerk of the court giving said notice, a statement in writing, which shall be signed and verified by the oath of the claimant, and shall include as near as may be the following: The name and post-office address of the person, corporation or association making the claim; the nature of the use on which the claim of appropriation is based; the flow per second of water used and the time during which it has been used each year; the name of the stream or other source from which the water is diverted; the place on such stream or source where the water is diverted, and the nature of the diverting works; the date when the first work for diverting the water was begun, and the nature of such work; the dimensions, grade, shape and nature of the diverting channel, as originally constructed; the date when the original diverting channel was completed; the date when the water was first used, the flow per second, and the time during which the water was used the first year; the date and nature of each subsequent change made in the original diverting channel; the flow per second of the water used and the time it was used each year between each of the changes so made, and the dimensions, grade, shape and nature of the present diverting chan-

nel; the place where and the manner in which the water was first used; the nature of each subsequent change in the place or manner of use, and the place and manner of present use; and such other facts as will clearly define the extent and nature of the appropriation claimed. If the water claimed to have been appropriated is used for irrigation, the statement shall show, in addition to the above required facts, the area of land irrigated the first year and each subsequent year; the total area at present irrigated, and its location in the section, township and range wherein it is situated; the character of the soil and the kind of crops raised during the first year of use and the first year after each subsequent change of channel, and during the last year in which the water was applied.

If the water claimed to have been appropriated is used for developing power, the statement shall show, in addition to the above required facts, the number, size and kind of water wheels employed; the head under which each wheel is operated; the extent of the power produced, and the purposes for which and the places where it is used, and the point where the water is returned to the natural stream.

If the water claimed to have been appropriated is used for mining, the statement shall show, in addition to the above required facts, the name of the mine and the mining district in which it is situated; the nature of the material mined, and the place where the water is returned to the natural channel of the stream. Within sixty days after the expiration of the six months allowed for filing statements of claims, the State Engineer shall tabulate the facts contained in the different statements filed; a copy of said tabulation shall be immediately filed in the office of the clerk of said court, and a copy in the office of the county recorder of each county which embraces any part of said river system or water source.

Sec. 14. Statements to be filed. Failure to make statement a bar. The clerk of said court shall enter the statement in a book to be kept for that purpose and shall file and preserve the same in his office, noting the date of filing. The filing of each statement shall be considered notice to all persons of the claim of the party making the same, and any person failing to make and deliver such statement of claim to the clerk of the court within six months after the first publication of the notice provided for in the last preceding section, shall be forever barred and estopped from subsequently asserting any rights theretofore acquired to the use of water of said river system or water source, and shall be held to have forfeited all rights to the use of said water theretofore claimed by him; provided, that any claimant upon whom no other service of said notice shall be made than by publication in the newspaper, may apply to the court for permission to file a statement of claim after the time therefor has expired, and the court or judge thereof may extend the time for filing said statement, not exceeding one year from

the first publication of said notice, but, before said time is extended, the applicant shall give notice by publication in some newspaper having general circulation on said river system, to all other persons interested in the water of that river system or water source, and shall make it appear to the satisfaction of the court that, during the pendency of the proceedings, he had no actual notice thereof in time to appear and file a statement and make proof of his claim; and all parties interested may present affidavits as to the matter of actual notice of application.

Sec. 15. Referee to be appointed. At the expiration of six months after the first publication of the aforesaid notice, the district court of the county in which said statements of claim have been filed may appoint a referee or referees, not exceeding three, to take testimony and determine the rights of said claimants to the use of the water of said river system or water source, as in other equity cases. Any claimant may object to the appointment of any person as referee for the same cause for which challenges for cause may be taken to a petit juror in the trial of a civil action. Such objection must be heard and disposed of by the court, or a judge thereof, and affidavits may be read and witnesses examined concerning the same.

Sec. 16. Oath. Power of referee. The referee, or referees, before proceeding to hear any testimony, must be sworn well and truly to hear and determine the facts and issues referred to them, and true findings render according to the evidence, and he or they shall have power to administer oaths to all witnesses produced before him or them.

Sec. 17. Statements in place of pleadings. Maps and records of engineer's office evidence. The statements filed by the claimants shall stand in the place of pleadings, and issue may be made thereon. They shall unless the court determines the matter itself without a reference be referred and delivered to the referee or referees, with all other files and papers relating to water claims of said river system or water source, including the statement and map filed by the State Engineer, who shall, before the expiration of the six months allowed for filing statements of claim, as aforesaid, file with the clerk of said court, and with the county recorder of each county which embraces any part of said river system or water source, a copy of the map of said river system or water source, made in pursuance of his survey thereof; and whenever requested so to do, the State Engineer shall furnish the court or referee or referees with any information which he may possess, or copies of any of the records of his office which relate to the water of said river system or water source, and in all proceedings for the determination of the rights of claimants to the water of said river system or water source the said maps and records, or certified copies thereof, shall be competent and prima facie evidence of the facts stated therein or delineated thereon.

Sec. 18. Amendments permitted. Powers of referee. The referee or referees shall have power to allow amendments to any statement or

pleading, as the court might do, and upon the same terms and with like effect. He or they shall have power, and it shall be the duty of the court or referee or referees to take testimony at such times and places within the boundaries of the river system or water source as may be convenient to the respective claimants interested, and the court or referee or referees shall determine the rights of all said claimants as hereinafter provided. The court, referee or referees shall give not less than fifteen days notice to the claimants, stating when and where he or they will begin to take testimony; said notice shall be published in some newspaper having general circulation on said river system or water source, and upon the date named in the notice, the court, referee or referees shall begin to take the said testimony, and shall continue the same until all the testimony relating to claims to water of said river system or water source is completed; provided, that a notice shall be served upon each claimant at least fifteen days before the testimony is taken upon his or its claim, stating the time and place, when and where such testimony will be taken, and said notice shall be served in the same manner as a summons issued out of the district court. But he or they may grant adjournments from time to time as occasion may require, and during all of said time the map or maps and other records furnished by the State Engineer, as hereinbefore provided, shall be open to the inspection of all parties interested.

Sec. 19. Any interested party may contest. Any person, corporation or association owning any irrigation works, or claiming any interest in the water of said river system or water source, may contest the rights of any person, corporation or association who have filed statements of claim for any water of said river system or water source, by filing a written statement of the grounds of their contest with the clerk of said court, within thirty days after the filing of the tabulation of facts provided for in section 13; which statement of contest shall be verified by the oath of the contestant. Upon the filing of said contest, the referee or referees shall fix the time for hearing the same, which date shall be not less than thirty days nor more than sixty days from the time when the notice is served on the party, which notice and the return thereof shall be made in the same manner as summons is served in civil actions in the district courts of this State.

Sec. 20. Subpoenas for witnesses. The referee, or referees shall have power to issue subpoenas to witnesses which shall be served in the same manner as subpoenas issued out of the district court, and all witnesses so subpoenaed shall attend and testify and produce books and papers and documents, as required, before such referee or referees, and said witnesses shall receive the same fees as in civil cases in the district court, to be paid by the party or parties against whom the contest shall be finally determined.

Sec. 21. Referees' findings. On the completion of the evidence, the

referee or referees shall state, in writing, the facts found by him or them, as to each claim submitted, and the conclusions of law in relation thereto, separately, and shall report the same, with a form of decree, to the district court; and said court may review said report and enter decree thereon, or set aside, alter or modify the same and enter decree thereon so altered or modified, and, when necessary, may require the referee or referees to amend his or their reports. All the testimony taken by any referee or referees shall be stenographically reported, and the same, together with all other evidence in the matter, shall be transmitted to, preserved and filed in the office of the clerk of said district court, with the report of such referee or referees. Notice of the filing of the report of the referee or referees shall be given by the clerk, as the court may direct, and exceptions to the findings and report of the referee may be taken by the parties, as the court shall prescribe by rule.

Sec. 22. Effect of decree. The decree shall determine and establish the rights of the several claimants to the use of the water of said river system or water source, and among other things shall set forth the name and postoffice address of the person, corporation or association entitled to the use of the water; the quantity of water in acre-feet or the flow of water in second feet to be used; the purpose for which the water is to be used; the time during which the water is to be used each year; the name of the stream or other source from which the water is diverted; the place on the stream or other source where the water is diverted; the priority number of the right; the date of the right, and such other matter as will fully and completely define the right of said person, corporation or association to the use of the water.

Sec. 23. Decree may be appealed from. The decree so entered by the district court may be appealed from to the supreme court, in like manner as from decrees and judgments in other cases; provided, that such appeal shall be taken within six months after the entry of said decree, and all proceedings on appeal shall be conducted according to the provisions of the code of Civil Procedure, and the practice on appeals from the district court to the supreme court.

Sec. 24. Certificate of water right to be issued. If no appeal is taken from said decree within six months after the same has been entered, or if the case is appealed, within thirty days after the final decree is entered, it shall be the duty of the clerk of the court making said decree to issue to each person, corporation or association having been awarded the use of water by said decree, a certificate in duplicate, attested under the seal of the court, setting forth the substance of said decree, as specified in section 22. One copy of said certificates shall be transmitted, in person or by registered mail, to the appropriator, who shall, within thirty days, have the same recorded in the office of the county recorder of the county in which the water is diverted from its natural channel, and the other shall be delivered to the State Engineer

and filed in his office as part of the records thereof. The letter "A" shall be prefixed to the priority number of each certificate so issued to distinguish it from certificates issued by the State Engineer.

Sec. 25. Proceedings when judge or referee is claimant. If the referee shall be a claimant to any water of said river system or water source, all testimony and evidence pertaining to his claim shall be taken by the district court of the county in which the statements are filed; and if the district judge is a claimant of any of the water of said river system or water source, he shall file his statement in the district court of the adjoining district, and a copy of the statement in the court of his own county. In such case the court of the adjoining district shall receive and act upon the referee's report and enter decree in the matter.

Sec. 26. Water divisions and districts. To enable an equitable and orderly apportionment of the water to be made among the several persons, corporations and associations, according to their respective rights, the State shall be divided into water divisions by the State Engineer, who shall subdivide the same into districts, which shall be so constituted as to secure the best protection to the water users and the most economical supervision on the part of the State. Said water divisions and districts shall be created from time to time, as necessity therefor arises. The divisions shall be designated by names, and the districts by numbers.

Sec. 27. Superintendents and supervisors. There shall be a superintendent of each water division, who shall be appointed by the State Engineer with the consent of the Governor, and shall hold his position during the pleasure of the Engineer. There shall be a supervisor for each water district appointed by the Board of County Commissioners of the county in which he serves, who shall hold his position during the pleasure of said board.

Sec. 28. Duties of superintendent. The superintendent of each water division shall have control of the district supervisors and of the apportionment of the water in the several districts of his division, under the direction of the State Engineer. He shall execute the laws of the State, and enforce the regulations of the State Engineer relative to the distribution of water, and perform such other duties as shall be assigned to him by the State Engineer, under whose general supervision he shall act.

Sec. 29. Duties of supervisor. The supervisor of each district shall apportion the water in the natural stream or streams of his district, among the several ditches taking water therefrom, according to their respective rights, under the direction of the superintendent of his division. He shall so apportion, regulate and control the use of the waters of all streams within his district as will prevent waste.

Sec. 30. Assistants to supervisors. Each supervisor shall have

power, in cases of emergency, with the consent of the superintendent of his division, to employ suitable assistants to aid him in the discharge of his duties. The employment of all such assistants shall terminate when the emergency ceases to exist, or when directed by the superintendent of the division.

Sec. 31. Appeal from superintendent or supervisor to engineer. Any person who may deem himself injured or discriminated against by the enforcement of any rule or regulation; or by act of a division superintendent or district supervisor, may apply to the State Engineer for relief by filing with him a statement of the manner in which he is injured or discriminated against.

Sec. 32. Compensation of superintendent. Each division superintendent shall receive from the State such compensation as shall be fixed by the State Engineer, and the same shall be determined with reference to the extent and character of the service performed by each.

Sec. 33. Compensation of supervisor. Each district supervisor shall keep a true and just account of the time spent by him in performing his duties, stating the time spent in each county, respectively, into which his district may extend, and shall present a true copy thereof, verified by oath, to the Board of County Commissioners of the county in which the work may have been done. And the said Board of County Commissioners shall, upon approval thereof by the superintendent of the water division, allow him the sum of three dollars per day for each day he shall have been actively employed, to be paid by the county in which the work has been performed. He shall, in like manner, keep and report the time of all assistants employed in his district which when approved in the manner aforesaid, shall be paid by the Board of County Commissioners of the county in which the work was done, at the rate of two dollars per day.

Sec. 34. Rights to unappropriated water. Rights to the use of any of the unappropriated water in the State may be acquired by appropriation, in the manner hereinafter provided, and not otherwise. The appropriation must be for some useful or beneficial purpose, and, as between appropriators, the one first in time shall be first in right.

Sec. 35. Application for unappropriated water. Any person, corporation or association, to hereafter acquire the right to the use of any public water in the State of Utah, shall, before commencing the construction, enlargement or extension of any ditch, canal or other distributing works, or performing similar work tending to acquire the said right of appropriation, make an application in writing to the State Engineer. Such application shall be upon a blank to be furnished by the State Engineer, and shall set forth the name and postoffice address of the person, corporation or association making the application; the nature of the proposed use for which the appropriation is intended; the quantity of water in acre-feet or the flow of water in second feet to

be used, and the time during which it is to be used each year; the name of the stream or other source from which the water is to be diverted; the place on such stream or source where the water is to be diverted, and the nature of the diverting works; and the dimensions, grade, shape and nature of the proposed diverting channel; and such other facts as will clearly define the full purpose of the proposed appropriation. If the proposed use is for irrigation, the application shall show, in addition to the above required facts, the legal sub-divisions of land proposed to be irrigated, with the total area thereof, and the character of the soil. If the proposed use is for developing power, the application shall show, in addition to the above required facts, the number, size and kind of water wheels to be employed; the head under which each wheel is to be operated; the extent of the power to be produced, and the purposes for which and the places where it is to be used; also, the point where the water is to be returned to the natural stream or source. If the proposed use is for mining, the application shall show, in addition to the above required facts, the name of the mine and the mining district in which it is situated; the nature of the material mined, and the place where the water is to be returned to the natural stream or source. The place of diversion and the place of return of the water shall be designated with reference to the United States land corners or mineral monuments, when either the point of diversion or the point of return shall be situated within six miles of the nearest United States land corner.

Sec. 36. Action of Engineer thereon. On receipt of said application, it shall be the duty of the State Engineer to make an endorsement thereon of the date of its receipt, and to make a record of such receipt in a book in his office kept for that purpose. It shall be his duty to examine said application and ascertain if it sets forth all the above required facts, and if not, he shall return the same for correction. The date of such return, with the reasons therefor, shall be endorsed on the application, and a record made thereof in the book kept for recording receipts of applications. Like entries shall be made of the date when corrected applications are received by the State Engineer and of the date when rejected applications are returned to the applicant.

Sec. 37. Notice of application. If not corrected as required, no further proceedings shall be had on such application, but when filed in compliance with this act, the State Engineer shall at once, at the expense of the applicant, to be paid in advance, publish in some newspaper having a general circulation within the boundaries of the river system or water source from which said appropriation is to be made, a notice of the application showing by whom made; the quantity of water sought to be appropriated; the stream from which the appropriation is to be made, and at what point on the stream; the use for which it is to be appropriated, and by what means; which notice shall be published as often as such paper is issued, for thirty days.

Sec. 38. Protest may be made. Any person, corporation or association interested may, at any time within thirty days after the completion of the publication of said notice, file with the State Engineer, a written protest against the granting of said application, stating the reasons therefor, which shall be duly considered by said engineer, who shall approve or reject said application.

Sec. 39. Applications filed and recorded. Action thereon. All applications which shall comply with the provisions of this act and with the regulations of the State Engineer's office, shall be filed and recorded in a suitable book kept for that purpose; and it shall be the duty of said engineer to approve all applications made in proper form and which are not in conflict with prior applications or where the proposed use will not impair the value of existing rights. But, where there is no unappropriated water in the proposed source of supply, or where the proposed use will conflict with prior applications or with existing rights, it shall be the duty of the State Engineer to reject such application.

Sec. 40. Proceedings after action. The approval or rejection of an application shall be endorsed thereon and a record made of such endorsement in the State Engineer's office. The application, so endorsed, shall be returned to the applicant. If approved, the applicant shall be authorized, on receipt thereof, to proceed with the construction of the necessary works and to take all steps required to apply the water to the use named in the application and to perfect the proposed appropriation. If the application is rejected, the applicant shall take no steps toward the prosecution of the proposed work, or the diversion and use of the public water, so long as such rejection shall continue in force.

Sec. 41. May require additional information. Before either approving or rejecting an application, the State Engineer may require such additional information as will enable him to properly guard the public interests, and may require a statement of the following facts; In case of incorporated companies, he may require the submission of the articles of incorporation; the names and places of residence of its directors and officers, and the amount of its authorized and its paid up capital. If the applicant is not an incorporated company, he may require a showing as to the name or names of the party or parties proposing to make the appropriation, and a showing of facts necessary, to enable him to determine whether or not they have the financial ability to carry out the proposed work, and whether or not the said application has been made in good faith.

Sec. 42. Time for beginning or completing work. In his endorsement of approval on any application, the State Engineer shall require that actual construction work must begin within six months from the date of such approval, and that the construction of the proposed works shall be completed within a period of five years from the date of

such approval. He may limit the applicant to a less period for the completion of the work and the perfection of the right. The State Engineer shall have authority, for a good cause shown, to extend the time within which any irrigation or other works shall be completed or the appropriation perfected.

Sec. 43. Aggrieved party may bring action. Any applicant or protestant, who is dissatisfied with the action of the State Engineer, may bring an action in the district court of the county in which the point of diversion of the water proposed to be appropriated is situated, for the purpose of adjudicating the questions involved between the applicant and protestant. Such action must be brought within sixty days of notice of the action of the State Engineer, and if not brought within that time, the Engineer shall proceed in accordance with the action taken thereon by him. But if such action be brought within said time, notice thereof shall be filed with the State Engineer, and thereafter he shall take no further action upon such application or protest until the rights of the parties shall be determined by mutual agreement among themselves or by the courts. Upon the final determination of the case by the courts, a copy of the decree shall be filed with the State Engineer, and thereupon he shall proceed in accordance with such decree.

Sec. 44. Upon completion of works proof and map must be filed. Upon completing the works to divert and appropriate the water in accordance with his application therefor, the applicant shall immediately make proof thereof, by filing in the State Engineer's office, on blanks to be furnished by the State Engineer, a statement descriptive of the work done. Said statement shall be sworn to by the applicant and by two disinterested witnesses and shall be accompanied by a map, profile and drawings, which shall be made on tracing linen and shall show fully and accurately the location with reference to the United States land surveys; the nature and extent of the completed works; the natural stream or other source from which and the place where the water is diverted; the places and manner of crossing or connecting with other works or streams; the ground and grade lines, cross-sections and dimensions of the various forms of the diverting channel; the character of the materials moved and used in construction; the several appliances employed to divert, measure and regulate the water; the character of all structures which cross, support or constitute the diverting channel or any part of it and such other matter as will fully and correctly delineate the work done and conform to the general rules and regulations of the State Engineer's office. The map, profile and drawings shall each be certified, under oath, by the engineer who has made the same and by the applicant whose works they represent. Said certificates to be substantially of such form as the State Engineer shall by general rule prescribe. No certificates of appropriation, shall be issued by the State Engineer before the proof of appropriation shall have been made

in the manner hereinabove described and any person who shall refuse or neglect to make such proof shall be guilty of a misdemeanor. Provided, that in case of works constructed by the National Government, the official plans, maps and specifications approved by the proper officer of the reclamation service, shall be accepted as a full compliance with the requirements of this section, relating to maps, profiles and drawings.

Sec. 45. Certificate of appropriation. Effect of. Upon it being made to appear to the satisfaction of the State Engineer that any appropriation has been perfected in accordance with the application therefor, it shall be the duty of the State Engineer to issue a certificate, in duplicate, to the party making the same, setting forth the name and postoffice address of the person, corporation or association by whom the water is to be used; the quantity of water in acre-feet or the flow of water in second feet; the purpose for which the water is to be used; the time during which the water is to be used each year; the name of the stream or source from which the water is to be diverted; the place on the stream or source where the water is to be diverted; the priority number of the right; the date of the appropriation, and such other matter as will fully and completely define the right of said person, corporation or association to the use of the water. One copy of said certificate shall be filed in the office of the State Engineer, and the other copy shall be delivered to the appropriator and shall within thirty days be recorded by him in the office of the county recorder of the county where the water is diverted from the natural stream or source. The certificate so issued and filed shall be prima facie evidence of the appropriator's right to the use of the water in the quantity, for the purpose and during the time mentioned therein, and shall be evidence of such right. The letter "B'' shall be prefixed to the priority number of each certificate so issued to distinguish it from certificates issued by the district courts.

Sec. 46. Priority. The priority number of such appropriation shall be determined by the date of receiving the written application in the State Engineer's office.

Sec. 47. Waters public property. The water of all streams and other sources in this State, whether flowing above or under the ground, in known or defined channels, is hereby declared to be the property of the public, subject to all existing rights to the use thereof.

Sec. 48. Standard of measurement. The standard unit of measurement of the flow of water shall be the discharge of one cubic foot per second of time, which shall be known as a second foot; and the standard unit of measurement of the volume of water shall be the acre-foot, being the amount of water upon an acre covered one foot deep, equivalent to forty-three thousand five hundred and sixty cubic feet.

Sec. 49. Beneficial use. Beneficial use shall be the basis, the measure and the limit of all rights to the use of water in this State.

Sec. 50. Eminent domain. The use of water for beneficial purposes, as provided in this act, is hereby declared to be a public use. Any person, corporation or association shall have a right of way across and upon public, private and corporate lands, or other right of way, for the construction, maintenance, repair and use of all necessary reservoirs, dams, water gates, canals, ditches, flumes, tunnels, or other means of securing, storing and conveying water for irrigation or for any necessary public use, or for drainage, upon payment of just compensation therefor, but such right of way shall in all cases be exercised in a manner not to unnecessarily impair the practical use of any other right of way, highway, or public or private road, nor to unnecessarily injure any public or private property. Such right may be acquired in the manner provided by law for the taking of private property for public use.

Sec. 51. Right to enlarge existing canal. When any person, corporation or association desires to convey water for irrigation or for any other beneficial purpose and there is a canal or ditch already constructed that can be enlarged to convey the required quantity of water, then such person, corporation or association, or the owner or owners of the land through which a new canal or ditch would have to be constructed to convey the quantity of water necessary, shall have the right to enlarge said canal or ditch already constructed, by compensating the owner of the canal or ditch to be enlarged, for the damage, if any, caused by said enlargement; provided, that said enlargement shall be done at any time from the first day of October to the first day of March, or at any other time that may be agreed upon with the owner of said canal or ditch.

Sec. 52. Water reverts upon abandonment. When the appropriator or his successor in interest abandons or ceases to use water for a period of seven years, the right ceases, and thereupon such water reverts to the public, and may be again appropriated, as provided in this act; but questions of abandonment shall be questions of fact, and shall be determined as are other questions of fact.

Sec. 53. Place of diversion and use may be changed. Any person, corporation or association entitled to the use of water may change the place of diversion and may use the water for other purposes than those for which it was originally appropriated, but no such change shall be made, if it impairs any vested right, without just compensation; and every change so made, shall be immediately reported to the State Engineer, and, if the place of diversion is changed, then the report shall be accompanied by a map, which shall clearly represent such change and show the places from and to which the change has been made, and the course and distance between the two places. Any person, corpora-

tion or association failing to make such report shall be guilty of a misdemeanor.

Sec. 54. Water may be commingled and recovered. Any appropriated water may be turned into the channel of any natural stream, or into a reservoir constructed across the bed of any natural stream, and commingled with its waters and then be recovered, but, in so doing, the original water in such stream or reservoir must not be diminished in quantity or deteriorated in quality.

Sec. 55. Headgates. Every person, corporation or association using water in this State shall construct and maintain a substantial headgate at the point where the water is diverted, and a measuring device, as near the head of the diverting channel as is practicable, for the purpose of regulating and measuring the quantity of water that may be diverted into the channel from the stream or other source. Said headgate and measuring device shall be of such pattern as the State Engineer shall approve, and shall be constructed within thirty days after request from him. Any person, corporation or association failing to comply with the provisions of this section shall be guilty of a misdemeanor, and the State Engineer is hereby authorized to furnish plans and bills of material for such devices, at the expense of the State, when in his judgment the use of such devices will be encouraged thereby.

Sec. 56. Priority among appropriators. Appropriators shall have priority among themselves according to the dates of their respective appropriations, so that each appropriator shall be entitled to receive the whole supply to which his certificate entitles him before any subsequent appropriator shall have any right; provided, that whenever the natural flow of any stream shall have receded in volume in the annual low water stage, then the rights of all users to such flow at such stage shall be deemed to be equal as to priority, and the water when at or below such stage, shall be apportioned pro rata among said users. But, in times of scarcity, while priority of appropriation shall give the better rights as between those using water for the same purpose, the use for domestic purposes shall have preference over use for all other purposes, and use for agricultural purposes shall have preference over use for any other purpose, except domestic use.

Sec. 57. Stock may be taken in other irrigation companies. Any irrigation or reservoir company, incorporated and existing under the laws of this State, may purchase or subscribe for the capital stock of any other similar corporation, which, at the time of such purchase or subscription, shall be or is about to be incorporated; provided, that such purchase or subscription shall be made only when permitted by the original articles of incorporation or by amendment thereto proposed and adopted according to law, and such corporations are hereby permitted and authorized to amend their articles of incorporation so as to authorize such purchase or subscription.

Sec. 58. Ditches must be kept in repair. The owner or owners of any ditch, canal, flume or other water course shall maintain the same in repair, so as to prevent waste of water or damage to the property of others. Such persons are required, by bridge or otherwise, to keep such ditch, canal, flume or other water course in good repair where the same crosses any public road or highway, so as to prevent obstruction to travel, or damage or overflow to such public road or highway.

Sec. 59. Each person or corporation liable for proportionate expense. When two or more persons, companies or corporations are associated by agreement or otherwise, in the use of any dam, canal, reservoir, ditch, flume or other means of conserving or conveying water for the irrigation of land, or for other purposes, each of them shall be liable to the other for the reasonable expense of maintaining, operating and controlling the same, in proportion to the share of the use or ownership of the water to which he is entitled. If any person, company or corporation refuse or neglect to pay his proportion of such expense, after five days notice in writing demanding such payment, he shall be liable therefor in an action for contribution; provided, that in any company or corporation owning or controlling more than one canal or ditch, for the purpose of improving or keeping the same in repair, the users of water shall not be required to pay any expenses or assessments in any canal or ditch, other than the one in which they are directly interested.

Sec. 60. Water rights appurtenant to land under government works. That all water hereafter appropriated for irrigation purposes from works constructed or controlled by the United States shall be appurtenant to specified lands owned or occupied by the persons claiming the right to use the water, so long as the water is used beneficially thereon; provided, that if for any reason it should at any time become impracticable to use water beneficially or economically for the irrigation of any land to which the right of the same is appurtenant, said right may be severed from said land, and simultaneously transferred, and become appurtenant to other land, without losing priority of right theretofore established, if such change can be made without detriment to existing rights, and in case of such change, the owner of such water right shall execute and acknowledge a proper instrument of transfer describing therein the land from and to which such water is transferred which instrument shall be received in the county recorder's office of the county in which the land is situated.

Sec. 61. Rights to water pass with land. Exceptions. A right to the use of water appurtenant to the land shall pass to the grantee of such land, and, in cases where such right has been exercised in irrigating different parcels of land at different times, such rights shall pass to the grantee of any parcel of land on which such right was exercised next preceding the time of the execution of any conveyance thereof; subject, however, in all cases to payment by the grantee of any such

conveyance, of all amounts unpaid on any assessment then due upon any such right; provided, that any such right to the use of water, or any part thereof, may be reserved by the grantor in any such conveyance, by making such reservation in express terms inserted in such conveyance, or may be separately conveyed.

Sec. 62. Water rights transferred by deed. Exceptions. Water rights shall be transferred by deeds, in substantially the same manner as real estate, except when they are represented by shares of stock in a corporation, and such deeds shall be recorded in the office of the recorder of the county where the place of diversion of the water from its natural channel is situated. Every deed of water right so recorded shall, from the time of filing the same with the recorder for record, impart notice to all persons of the contents thereof, and subsequent purchasers, mortgagees and lien holders shall be deemed to purchase and take with notice.

Sec. 63. Deeds must be recorded. Every deed of water right within this State hereafter made, which shall not be recorded as provided in this act, shall be void as against any subsequent purchaser, in good faith, and for a valuable consideration, of the same water right, or any portion thereof, where his own deed shall be first duly recorded.

Sec. 64. Penalty. Any person, corporation or association who shall in any way interfere with, injure, destroy or remove any dam, headgate, weir or other appliance for the diversion, apportionment or measurement of water, or who shall interfere with any of the persons authorized by this act to apportion water, while in the discharge of their duties, shall be guilty of a misdemeanor, and shall also be liable in damages to any person injured by such unlawful act.

Sec. 65. Obstructions to right of way forbidden. Whenever any person, corporation or association has the right of way for canals or other water courses, it shall be unlawful for any person to place or maintain in place any obstruction, by fence or otherwise, along or across such canals or water courses, without providing gates sufficient for the passage of the owners of such canals or water courses or their agents. Any person, corporation or association violating the provisions of this section shall be guilty of a misdemeanor.

Sec. 66. Legal advisers to State Engineer. In all matters requiring legal advice in the performance of his duties and the prosecution or defense of any action growing out of the performance of his duties, the Attorney General of the State and the district attorney of the district in which any legal question arises, shall be the legal advisers of the State Engineer, and they are hereby required to perform any and all legal services required of them by him, without other compensation than their salaries now or hereafter fixed by law.

Sec. 67. Fees of State Engineer. The State Engineer shall collect

the following fees, which shall be paid by him into the State Treasury on the first Monday in January, April, July and October of each year:

For examining and approving plans and specifications for any dam, one dollar for each and every foot in height of the dam to be built; and if necessary, to inspect the site where the dam is to be built, an additional charge of ten dollars per day and expenses shall be made.

For inspecting any diverting works, by request, ten dollars per day and expenses.

For examining and filing applications to appropriate water, each, two and 50-100 dollars.

For examining map, profile and drawings that are part of the proof of appropriation, five dollars.

For approving and recording completed applications, two and 50-100 dollars.

For issuing certificates of appropriation, each, one dollar.

For examining and filing notices of protest, each, two and 50-100 dollars.

For filing any other paper, one dollar.

For certified copy of any paper, per folio, twenty cents.

For blue print copy of any map, profile or drawing, per square foot, ten cents.

For each certificate to copy of paper, drawing or map, fifty cents; Provided that the provisions of section 67 shall not apply to works prosecuted under the supervision of the United States Reclamation service.

Sec. 68. Assistance and equipment. For the purpose of carrying into effect the provisions of this act, the State Engineer shall have power to employ all necessary assistants, purchase all necessary equipment, and do all other necessary things, the cost of which shall be paid by the State, upon presentation to the State Auditor of monthly statements, certified by the State Engineer; and approved by the State Board of Examiners; provided, that no expense shall be incurred by the State Engineer in the performance of his duties which will exceed the amount appropriated for that purpose.

Sec. 69. Fees of referee and stenographer. The fees of referees and stenographers shall be fixed by the court, and together with any other expenses, not herein provided for, that may be incurred in carrying out the provisions of this act, shall be paid out of the State Treasury, upon certificates from the proper district judge to the State Auditor of the amount due each person for such service.

Sec. 70. Who may be made parties to actions. In any action hereafter commenced for the protection of rights acquired to water under the laws of this State, the plaintiff may make any or all persons who have diverted water from the same stream or source parties to such

action, and the court may in one judgment settle the relative priorities and rights of all the parties to such action. When damages are claimed for the wrongful diversion of water in any such action, the same may be assessed and apportioned by the jury in their verdict, or by a court if the case be tried without a jury, and judgment thereon may be entered for or against one or more of several plaintiffs, or for or against one or more of several defendants, and may determine the ultimate rights of the parties between themselves. In any action concerning joint water rights, or joint rights in water ditches, unless partition of the same is asked by the parties to the action, the court shall hear and determine such controversy as if the same were several as well as joint.

Sec. 71. Effect of certain repeal. The repeal by the Revised Statutes of sections twenty-four hundred and three to twenty-four hundred and twenty-seven, both inclusive, of the Compiled Laws of Utah, 1888, shall not be constructed to affect the existence of any district or company organized under the aforesaid sections; but any such company or district shall, notwithstanding such repeal, continue in existence with all the rights, privileges and limitations heretofore conferred or imposed upon it by law, until disincorporated or dissolved according to law. In any case in which an irrigation company or district shall have a right of action against a delinquent member of such company or district for the non-payment of taxes voted according to law, the board of directors thereof may proceed to sell the interest of such members in the canals or ditches of such company or district and his right to the use of the water flowing therein.

Sec. 72. Dissolution of irrigation district. Whenever a petition is presented to the board of trustees of any irrigation company or district organized under the sections mentioned in the next preceding section, signed by one-fourth of the landholders in the district, asking for the abandonment of further operations by the company or district, the board of trustees thereof shall call a special meeting, at which the question of such abandonment shall be submitted. Notice of the time and place and subject of such meeting shall be given by the board of trustees of the district at least ten days previous thereto, by advertising at least three times in some newspaper having general circulation in the district, or by posting notices in three public places therein. If three-fifths of the landholders of the district voting at such election shall vote for such abandonment, it shall be the duty of the board of trustees to petition the district court of the county in which the greater portion of the lands of the district are situated for the winding up of the affairs of such company or district; and thereafter proceedings shall be had which shall conform as nearly as may be with the proceedings for the voluntary dissolution of corporations.

Sec. 73. "Received" and "filed" defined. Whenever the word "received" is used in this act, with reference to any paper deposited in the

office of State Engineer, it shall be deemed to mean the date when such paper was first received at the State Engineer's office; and whenever the the term "filed" is used in such reference, it shall be deemed to mean the date when such paper was completed and filed in said office.

Sec. 74. Repeal. That chapter 100 of the laws of Utah, 1903 and all other laws and parts of laws in conflict with the provisions of this act, are hereby repealed; but such repeal shall not affect any vested rights, and any person, corporation or association who may have heretofore filed notice of appropriation of water, or initiated any right under the provisions of said law or any other law heretofore in force in this State, may complete and perfect such appropriation or right in the same manner and with like effect as if this repeal had not been made; and such right may be perfected in accordance with the provisions of the law under which the right was initiated or under the provisions of this act; nor shall such repeal prevent the water commissioners appointed under the act of 1901 from performing the duties therein prescribed, until they are superseded by the appointment of division superintendents and district supervisors as provided in this act, and, if necessary, other water commissioners may be appointed in the manner provided in said act, to serve until they are superseded, as provided herein.

Sec. 75. This act shall take effect upon approval.

Approved this 9th day of March, 1905.

WASHINGTON.

The legislation in Washington is modeled upon that of California (Ballinger's Code 1897, sec. 4092 et seq.), though with some changes. Provisions for irrigation districts are found in Ballinger's Code, sections 4166-4249. The courts follow the California system recognizing the common law of riparian rights. (See text.)

WYOMING.

References are to Constitution, articles I and VIII; Revised Statutes of 1899; Statutes of 1901; 1903; Statutes of 1905, pp. 14, 23, 26, 36, 104, 130, 147, 148.

Declaration of State Ownership.—"The waters of all natural streams, springs, lakes or other collections of still water, within the boundaries of the State, are hereby declared to be the property of the State." (Const., art. VIII, sec. 1.)

Concerning Riparian Rights.—Priority gives the better right, and no appropriation shall be denied except when such denial is demanded by the public interests. (Const., art. VIII, sec. 3.) The courts follow the Colorado system, rejecting riparian rights *in toto*. (See text.)

Administration.—Water is declared essential to industrial prosperity and the State shall equally guard its use for all interests involved. (Const., art. I, sec. 31.)

General control lies in a Board of Control ordained by the constitution, consisting of the State Engineer and the superintendents of the water divisions, and shall have control over all waters. (Const., art. VIII, sec. 2; Rev. Stats. 857.) The State Engineer shall be president of the board. (Const., art. VIII, sec. 5.) He has general powers over the whole State (*Ibid.*) and may inspect any works. (Rev. Stats. 932 et seq.) The constitution establishes four water divisions, with one superintendent for each (Const., art. VIII, sec. 4; Rev. Stats. 848), who controls waters within his division and performs whatever duties the State Engineer may assign (Rev.

Stats. 849, 850), and may make regulations for his division. (Rev. Stats. 851.) Each division may, as necessity arises, be divided into water districts by the State Board of Control (Rev. Stats. 888), with one water commissioner for each district (Rev. Stats. 889), who has direct control over the administration of water within his district (Rev. Stats. 890 et seq.), subject to appeal to the division superintendent and from him to the State Engineer and then to court. (Stats. 1901, p. 107.) He may make arrests. (Rev. Stats. 772.) Owners must maintain headgates and measuring devices or the division superintendent may shut off the water. (Stats. 1901, p. 99.) Disobeying officials is a misdemeanor. (Rev. Stats. 971; Stats. 1901, p. 95.)

Determination of Existing Priorities.—Existing priorities are determined by the Board of Control, whose decree, subject to rehearing or appeal within one year, is final. (Stats. 1901, p. 70.) A notice of investigation is published, and the division superintendent then begins taking evidence. (Rev. Stats. 861.) The claimant fills out blanks stating certain prescribed details, and swears thereto. (Rev. Stats. 863, 864.) If aggrieved by the evidence gathered by the division superintendent, he may have a special hearing. (Rev. Stats. 867 et seq.) From the data thus gathered the State Engineer prepares maps (Rev. Stats. 871), and from these data and the maps the Board of Control adjudges the right of each claimant. (Rev. Stats. 872.) The Board of Control then issues a *certificate* of priority which is recorded with the county clerk. (Rev. Stats. 873.) The Board of Control may order a rehearing, or an appeal may be taken to court. (Rev. Stats. 874, 883.)

Method of Appropriating.—Before commencing (or enlarging), application must be made to the State En-

gineer, stating certain details on a form prescribed by him (Rev. Stats. 917), accompanied by duplicate maps. (Rev. Stats. 924 et seq., 918.) He keeps a record of date of receipt of application. (*Ibid.*) If approved, he so indorses it and returns it to applicant, who may then go ahead (Rev. Stats. 920), and who must begin within a time fixed by the State Engineer (not over one year), and must complete it in a time likewise fixed (not over five years). (Rev. Stats. 922.) An appeal lies from the State Engineer to the Board of Control, and then to court. (Rev. Stats. 923.) Upon "perfection of the appropriation" a certificate is sent to the appropriator and recorded in the office of the county clerk. (Rev. Stats. 928.)

Relation.—Priority dates from the filing of the application with the State Engineer. (Rev. Stats. 929.)

Reservoirs.—Concerning dams over five feet in height, (Rev. Stats. 931), permit required from State Engineer. (Stats. 1903, p. 74.)

Measurement of Water.—The standard of measurement is 1 cubic foot per second. (Rev. Stats. 968.) No allotment for irrigation shall exceed 1 cubic foot per second for each seventy acres of land. (Rev. Stats. 872.)

PHILIPPINE ISLANDS.

32 United States Statutes at Large, 677, 704. Concerning Philippines.—"Beneficial use shall be the basis, the measure, and the limit of all rights to water in said islands." A common phrase in the States rejecting riparian rights *in toto* (page 697). Sections 2339 and 2340, Revised Statutes of the United States, are substantially enacted for the Philippines (page 704).

APPENDIX C.

FORMS.

The following forms, with the exception of that given for California, have been adopted by the State Engineers of the States having statutes prescribing forms, as set forth in the previous pages. In Wyoming these forms have been in use for fifteen years. Most of the States and Territories which adopted their irrigation codes during the present year (1905) have not yet prepared forms, while the forms herein given for Nevada have been in use but a short while, and are subject to change. In printing these forms in this book, the vacant spaces have been shortened to a line or less, though some of the forms leave sufficient space in places to write in several lines of description. For the forms following, the writer is greatly indebted to Mr. T. W. Jaycox, State Engineer, Denver, Colorado; Mr. James Stephenson, Jr., State Engineer, Boise, Idaho; Mr. Adna Dobson, State Engineer, Secretary, Lincoln, Nebraska; Mr. Henry Thurtell, State Engineer, Carson City, Nevada; Mr. A. L. Fellows, State Engineer, Bismarck, North Dakota; Mr. John H. Lewis, State Engineer, Salem, Oregon; Mr. Caleb Tanner, State Engineer, Salt Lake City, Utah; and Mr. Clarence T. Johnston, State Engineer, Cheyenne, Wyoming.

APPENDIX C.

FORMS.

CALIFORNIA.

No special forms are prescribed in California. Any arrangement containing the statements required by section 1415 of the Civil Code is a sufficient notice of appropriation.

The following notice was upheld in Vineland Irr. Dist. v. Azusa Irr. Co., 126 Cal. 482, where it was relied on by appropriators claiming an appropriation of both surface and underground water.

NOTICE.

Azusa, August 27, 1883.

To Whom It May Concern:

We, the undersigned, hereby claim the water here flowing in the channel of the San Gabriel River, to the extent of 5,000 inches measured under a four-inch pressure, and the purpose for which the same is claimed is for irrigation and domestic use on lands in Azusa Township and the County of Los Angeles, State of California, and owned by the stockholders of the Azusa Water Development and Irrigating Company.

The means by which it is intended to divert said water is by bedrock and surface dam, or both, tunnel, ditch, iron pipe, and flume, or any or either of such means as may be found most practicable, and the size of such tunnel will be six feet in height and six feet in

width, and the size of such ditch to be eight feet in width and five feet in depth. The size of such iron pipe to be forty inches in diameter, and the size of such flume is six feet six inches in width, and six feet and six inches in depth, or larger, if necessary, to carry the amount of water here claimed.

Such bedrock and surface dam, or either of them, to be constructed of rock, cement, logs, brush, and gravel, or either of them, or any of such material, or any other material found as well or better suited for the purpose of such construction.

AZUSA WATER DEVELOPMENT AND IRRIGATING COMPANY.

By M. BALDRIDGE,
Pres.

This notice was attacked on the ground that it did not give the place where the same was or was to be posted; but, as the notice was posted at the point which afterward became the mouth of the development tunnel, and specified the water "here flowing," the notice was held valid.

COLORADO.

Requirements for filing maps and statements of ditches and reservoirs, in compliance with chapter 126 of the Session Laws of 1903, and the regulations of the State Engineer's office thereunder.[1]

"Every person, association or corporation hereafter constructing or enlarging any reservoir or reservoirs, constructing, changing the location of, or enlarging any ditch, canal or feeder for any ditch or reservoir for the purpose of furnishing a supply of water for domestic, irrigation, power or storage, or for any other beneficial use, taking water from any natural stream, shall within sixty days after the commencement of such construction, change of location or enlargement, make filings in the office of the State Engineer for each specific claim." (Sec. 1, c. 126, Sess. Laws 1903.)

The maps must be in duplicate and filed in the office of the State Engineer within sixty days of the commencement of construction, which time may be the date of actual construction or the beginning of the survey. The duplicate is examined and certified to by the State Engineer, so that it may be returned and filed in the office of the county clerk within ninety days of said date of commencement of construction.

Maps must be on a good quality of white linen drawing paper 24x36 inches, with a two-inch margin on the left-hand side, making the available space for the map 24x34 inches. All maps to be made of this size irrespective of the size of the reservoir, or the ditch to be shown, and not folded. Use white mounted drawing paper.

1 NOTE.—Circular issued by the State Engineer.

All maps to be returned by mail should be accompanied by postage. (18 cents in stamps for each sheet 24x36.)

The scale of the map must correspondingly vary, but should be sufficient to clearly show each course and distance. It is desirable in the case of reservoirs, that the scale should be four hundred feet to an inch, or larger when needed to properly show the proposed works, if practical. In case the sheet is not of sufficient size for this purpose, then the map must consist of two or more sheets. In such case each sheet should be marked "Sheet No. 1," "Sheet No. 2," etc., and each sheet properly titled.

The ink used in making these maps must be water-proof for permanent record, and either Higgins (water proof) or Windsor Newton's Liquid India Ink may be used for this purpose. It is also desirable to have both the signatures and dates put in with water-proof ink, if possible.

All statements are placed upon the same sheet or sheets as the map.

(Below is the form of title for the map and statement.)

Form of Title.

Map of the

.....

(ditch or) Reservoir.

.....

County, Colorado.

Irrigation Division No..... Water District No.....

Courses True, Magnetic Variation.....E.

Scale of Map ..... inch = ... feet.

(Below is the form of statement to be used for a ditch filing.)

Form for Ditch Filing.

KNOW ALL MEN BY THESE PRESENTS: That the undersigned..... .... claimant, whose postoffice address is..... .... has caused to be located The ..... Ditch as hereinafter mentioned, have made these several statements relative thereto, and filed in compliance with the laws of the State of Colorado. The accompanying map, which shows the location of said ditch, forms a part of this filing and is hereby made a part thereof.

First. The headgate is located at a point on the ....bank of..... .... from which it derives its supply of water, whence the ..... corner of Section No. ...., Township ....., Range ..... of the ..... Principal Meridian, bears ..... feet.

Second. The land to be irrigated consists of ..... acres located as follows:..... Twp....., Rge..... P. M. (If the water is claimed for other purposes it should be clearly stated.)

Third.

The depth of said ditch is ..... feet.
The width of said ditch is ..... feet on the top.
The width of said ditch is ..... feet on bottom.
The grade of said ditch is ..... feet per 1,000 ft.
The length of said ditch is ..... feet.

Fourth. The carrying capacity of said ditch is ..... cubic feet per second of time (obtained by .....formula, giving the values of any co-efficients used), for which claim is hereby made for ..... purposes.

Fifth. The estimated cost is $.....

Sixth. Work was commenced by survey (or actual construction), on the .... day of ..... A. D. 190.....

(The map of the ditch should show the following.)

First. The location of the headgate by course and distance to a corner of the public survey, or if upon unsurveyed lands, to some natural object, so that the same may be easily located.

(NOTE.—The tie should be to a corner of the public survey.)

Second. The general course of the stream should be shown and the name given.

Third. The route of the ditch by course and distance.

Fourth. The legal 40-acre subdivisions and other patented lands.

Fifth. The ownership of all lands crossed by the ditch or canal.

(Below is form of statement used for a reservoir filing.)

Form for Reservoir Filing.

KNOW ALL MEN BY THESE PRESENTS: That the undersigned..... ....claimant ...., whose postoffice address is ....., has caused to be located The ..... Reservoir as hereinafter mentioned, have made these several statements relative thereto, and filed in compliance with the laws of the State of Colorado. The accompanying map, which shows the location of the said reservoir, forms a part of this filing and is hereby made a part thereof.

First. Height of dam ..... feet.

Second. The following table gives the areas and capacities for each foot in depth from the bottom of the outlet tube up to and including the high-water line.

Depth in feet	Area in sq. ft.	Capacity
Bottom of outlet.....0 ft.	....	....
1 ft.	....	....
2 ft.	....	....
3 ft.	....	....
4 ft.	....	....
		(High-water line.)

(etc., up to high-water line.)

Total capacity of said reservoir is ..... feet of water, for which claim is hereby made for ..... purposes.

Fourth. The source of supply of said reservoir is from..... ....

Fifth. The estimated cost $.....

Sixth. Work was commenced by ..... on the ..... A. D. 190.....

(The map of the reservoir should show the following.)

First. The location of the initial point of survey by course and distance to a corner of the public survey, or to some natural object if upon unsurveyed land.

Second. The high-water line of the reservoir by course and distance, the location of the dam and approximate contours at five foot intervals.

(NOTE.—The five-foot contours are to show the general topography of the site within the high-water line, and need not be run out as carefully as the high-water line.)

Third. The stream and name thereof upon which the reservoir is located should be shown on the map.

Fourth. Ditches to and from the reservoir, name,

course and distance, with grade, section of water prism and capacity in cubic feet.

Fifth. Legal 40-acre subdivisions and other patented lands.

Sixth. The ownership of the land on which the reservoir is located, or through which the inlet and outlet ditches pass.

(Below is the form of the affidavit to be filled out.)

Form of Affidavit.

State of Colorado, } ss.
County of ..... }

... ., being duly sworn on oath, deposes and says, that having read and examined the map and statements hereon, that the same are true to the best of his knowledge and belief.

.....,
(Claimant's signature.)

Subscribed and sworn to before me this ..... day of .....A. D. 19.....

My commission expires..... ....

.....,
Notary Public.

(The form of affidavit when claimant is a corporation.)

State of Colorado, } ss.
County of ..... }

....of The .....Company, which was incorporated under the laws of the State of ..... on the ..... day of ....., A. D. 1....., with a capital stock of $....., being duly sworn on his oath, deposes and says, that having

read and examined the map and statement hereon, that the same are true to the best of his knowledge and belief.

The..... .....Company.
By ....(official title).

Subscribed and sworn to before me this .....
day of ....., A. D. 19.....
My commission expires..... .....

.....,
Notary Public.

(Form of the engineer's affidavit.)

State of Colorado, }
County of ..... } ss.

....., being duly sworn on his oath, deposes and says that he is the engineer of the ..... Ditch (or reservoir), that the survey of the same and the map thereof was made by him (or that such map was made under his instructions) and that such survey is accurately represented upon this map; that he has read the statements thereon, and that the same are true of his own knowledge.

.....,
Engineer (or Surveyor).

Subscribed and sworn to before me this .....
day of ....., A. D. 19.....
My commission expires..... .....

.....,
Notary Public.

In General.

For enlargements of either ditches or reservoirs, the facts must be given as in the above before and after the enlargement.

For a protracted enterprise, where it is impossible to make complete surveys and maps within the sixty days, as complete a map and statement as possible should be filed. This should have the affidavit given below placed on the maps and properly signed and sworn to by the owner, which provides that a further and complete map will be furnished for filing as soon as the same can be completed.

(Form of affidavit.)

State of Colorado, } ss.
County of ..... }

....., being duly sworn on his oath, deposes and says, that though diligence has been used, because of ..... it is impossible to make complete maps and statements within the sixty days required, and that a further and complete map will be furnished for filing as soon as the same can be completed.

.....,
(Claimant's signature.)

Subscribed and sworn to before me this .....
day of....., A. D. 190....

My commission expires..... .....

.....,
Notary Public.

(NOTE.—The following is a quotation of the statutes that bears on the causes for a preliminary filing of this kind: "Whenever, through the necessity for extended surveys requiring long periods of time, it shall be impracticable for the claimant or claimants to file a complete map and statement within sixty days, as required above, a map and statement as complete as may be practicable shall be filed, * * * " The reasons for filing a complete map later should be covered by the above.)

(The following affidavit is placed on the map that is to be filed in the office of the State Engineer.)

State Engineer's Office,
Denver, Colo.

State of Colorado,
City and County of Denver. } ss.

I hereby certify that this map and statement has been examined and approved by me as agreeing with the statutes of the State of Colorado, and the regulations of this office, and was accepted for filing on the ..... day of ....., A. D. 19.....

.....,
State Engineer.

By.....,
Deputy.

(The following is the form of affidavit to be placed on the duplicate or the one to be filed in the office of the county clerk after being signed by the State Engineer.)

State Engineer's Office,
Denver, Colo.

State of Colorado,
City and County of Denver. } ss.

I hereby certify that this map and statement has been examined and approved by me, and is a duplicate of the one filed in the office of the State Engineer on the ..... day of ....., A. D. 19.....

.....,
State Engineer.

By.....,
Deputy.

(NOTE.—When maps or filings consist of more than one sheet the two affidavits of the State Engineer will not answer. The affidavits being of a different form will be placed on the maps in this office.

The filing fee is one ($1) dollar for each claim and one ($1) dollar for certifying to the duplicate copy.

One claim consists of one ditch or reservoir deriving its supply from one stream. Two claims will consist of two ditches or reservoirs deriving their supply of water from one source or one reservoir, or one ditch deriving its supply of water from two different sources, etc.)

IDAHO.

The following includes all forms from the application to appropriate to the license, arranged in order; also form for transfer of use of water right to use on different land. As to maps, see statutes, ante.

No. .....

Application for Permit to Appropriate the Public Waters of the State of Idaho.

1. Name of applicant..... ....
   Postoffice address: P. O..... .....
   County ....

I. If applicant is a corporation give:
   (a) Date and place of incorporation.....
   (b) The amount of capital stock.....
   (c) The amount paid in..... .....
   (d) The names and addresses of directors
   ....

II. The financial resources of the applicant are:
   (a) Cash on hand..... .....
   (b) Treasury stock..... ....
   (c) Bonds to be issued..... .....
   (d) Other resources..... .....

2. The quantity of water claimed is..... .....
   .....cubic feet per second.

3. Source of water supply..... ....
   County of ....

4. Location of point of diversion.....

5. To be used for:

I. Irrigation and domestic use:
   (a) Number of acres to be irrigated...acres.
   (b) In the following legal subdivisions.....
   (A list of lands to be irrigated may be appended as a part of this application.)

II. Mining, power, manufacturing or transportation purposes:
   (a) To be used for.....
   (b) Amount of power to be generated.....
   .....horse-power.
   (c) At what point.....
   (d) Is water to be returned to any stream?
   (e) If so, name stream and locate point of return.

6. Estimated cost of works.....

7. Description of works for diversion:

I. Kinds of works (reservoir, dam, ditch, flume, pipes, or otherwise).....

II. Dimensions of works:
   (a) Height of dam.....feet, length of dam at top.....feet, length of dam at bottom.....feet, material used in construction (wood, earth, stone or concrete)
   .....
   (b) Capacity of reservoir.....acre-feet.
   (c) Size of headgate, width.....feet, height.....feet.
   (d) Ditch (flume or pipe) width at bottom .....feet, width at water line .....feet, depth of water.....feet. Average grade per mile is.....feet. Length of ditch is.....miles, and it crosses the following quarter sections..... .....to .....which is the point of intended use.

8. Time required for the completion of the construction of such work is.....years. (The time must in no case exceed five years after date of approval of application.)

9. Time required for the complete application of the water to the proposed use is.....additional years. (The time must in no case exceed four years after the date set for the completion of works as defined in section 8.)

Remarks:

....
....
....

APPROVAL OF STATE ENGINEER.

The number of this permit is.....
Date of first receipt of application.....190..
Returned to applicant for correction.....190..
Corrected application received.....190..
Recorded in Book.....Page.....Approved.....
190..

This is to certify that I have examined the within application for a permit to appropriate the public waters of the State of Idaho and hereby grant the same, subject to the following limitations and conditions:

Good and sufficient bond to be filed in the sum of $.....on or before.....190..

Work to begin on or before ....., 190.., and to continue diligently and uninterruptedly to completion, unless temporarily interrupted by circumstances over which permit holder has no control.

One-fifth of the work above specified to be completed on or before..... ....

The whole of said work to be completed on or before
....

The time for the proof of beneficial use of water appropriated in accordance herewith, to extend to.....
....

Witness my hand this.....day of.....,
190.. .....
State Engineer.

(Endorsed:—)

No.....

Permit.

To appropriate water from.....County, Idaho.
Date of first receipt at office of State Engineer.....
.....
Returned to applicant for correction.....
Corrected application received..... .....
Recorded in Book.....Page.....
Approved ....
Work to begin ....
Bond to be filed..... ....
One-fifth of work to be completed.....
Whole work to be completed..... .....
Final proof of use of water.....
Fees $.....

Notice of Proof of Completion of Works.

(This blank must be filled out by holder of permit and forwarded by registered mail to the State Engineer at least 60 days before the time set for completion of works.)

(P. O.).....
(Date).....190..

To the State Engineer of the State of Idaho, Boise, Idaho.

Dear Sir:

Notice is hereby given that at.....M. on the .....day of.....190.., at.....

County of..... State of Idaho, before .....proof will be submitted of the completion of works for the diversion of..... cubic feet per second of the waters of..... in accordance with the terms and conditions of a certain permit heretofore issued by the State Engineer of the State of Idaho.

1. The name of the person or corporation holding said permit is..... .....

2. The postoffice address of such person or the place of business of such corporation is.....,
County of....., State of Idaho.

3. The number of such permit is....., and the date set for the completion of such work is.....
.....

4. Said water is to be used for.....purposes.

5. Said works of diversion will be fully completed on the date set for such completion, and the amount of water which said works are capable of conducting to the place of intended use, in accordance with the plans accompanying the application for such permit, is..... cubic feet per second.

6. The amount of lands for which said water is available is.....acres, particularly described as follows:

....

(In case of all canals or other works designed to divert and carry more than 50 cubic feet of water per second, the following certificate must be signed by a well known and competent engineer.)

I hereby certify that the facts set forth in the above notice are true.

.....
Engineer.

.....desire..that the above notice be published, according to law, in the.....of ....., published in the county in which said works are situated; the expense of which publication will be borne by.....

(Signature).....

(Endorsed:—)

No.....

Notice of Proof of Completion of Works.

Received ....
Date of proof..... .....
Place..... ....
Notice sent to..... .....
for publication on..... .....

Notice of Publication.

Notice is hereby given that at.....M. on the .....day of..... 190.., at..... County of.....State of Idaho, before ..... proof will be submitted of the completion of works for the diversion of..... cubic feet per second of the waters of ..... in accordance with the terms and conditions of a certain permit heretofore issued by the State Engineer of the State of Idaho.

1. The name of the person or corporation holding said permit is ....

2. The postoffice address of such person or the place of business of such corporation is..... County of....., State of Idaho.

3. The number of such permit is....., and the date set for the completion of such work is..... ....

4. Said water is to be used for.....purposes.

5. Said works of diversion will be fully completed on the date set for such completion, and the amount of water which said works are capable of conducting to the place of intended use, in accordance with the plans accompanying the application for such permit, is .....cubic feet per second.

6. The amount of lands for which said water is available is.....acres, particularly described as follows: .....

.....

State Engineer.

Permit No.....

Proof of Completion of Works.

Deposition of Holder.

Question 1.—State your name, age, residence, occupation and postoffice address.

Answer. ....

Ques. 2.—If acting in behalf of a corporation, state its name, principal place of business, your position with reference to same, and your authority for appearing in its behalf.

Ans. ....

Ques. 3.—State number and date of permit, amount of water you are authorized to divert, source, and point of diversion.

Ans. ....

Ques. 4.—State purpose for which water is to be used, and, if for irrigation, state the number of acres and give description of the land you intend to reclaim.

Ans. ....

Ques. 5.—State whether or not the water has been

turned into your works of diversion, and, if so, when and to what extent.

Ans. ....

Ques. 6.—State whether or not the works of diversion are fully completed, and whether or not they comply in all respects with the terms of the permit.

Ans. ....

Ques. 7.—If the works of diversion do not comply with all the terms of your permit, state fully those particulars in which there is any variance.

Ans. ....

Ques. 8.—Give description of works, state dimensions and capacity of each part, and give cost of same.

Ans. ....

(Sign here.).....

I hereby certify that the foregoing testimony was read to the above subscriber before its signing, that I believe him to be the person he represents himself to be, and that said testimony was subscribed and sworn to before me, at my office in....., County of....., State of Idaho, on this ....., day of.....A. D. 190....

.....

(Endorsed:—)

Permit No.....

To appropriate..... .....second-feet of water from..... ....

County, Idaho.

By..... ....

Proof of Completion of Works.

Deposition of Holder.

Received and filed .....

The depositions of two witnesses, in this form, taken separately, required in each case.

Permit No.....

Proof of Completion of Works.

Deposition of Witness.

Question 1.—State your name, age, residence, occupation and postoffice address.

Answer. ....

Ques. 2.—Are you acquainted with....., the holder of Permit No. ....., authorizing the diversion of ..... second-feet of the waters of ..... at....., for.....purposes? How long have you known him, and where does he reside?

Ans..... ....

Ques. 3.—Have you read or heard read said Permit No. ....., and are you familiar with its terms and conditions?

Ans..... ....

Ques. 4.—(If for irrigation purposes.) Are you acquainted with the land proposed to be irrigated under said permit? If so, describe same, state its character, and give your estimate of the amount of water required for its profitable cultivation.

Ans..... ....

Ques. 5.—Are the works of diversion fully completed and of sufficient capacity to convey the entire amount of water set out in the permit from point of diversion to place of use?

Ans..... ....

Ques. 6.—Describe the works of diversion as they now exist, and give your estimate of their capacity?

Ans..... ....

(Sign here).....

I hereby certify that the foregoing testimony was read to the above subscriber before its signing, that I believe

him to be the person he represents himself to be, and that said testimony was subscribed and sworn to before me, at my office in....., County of....., State of Idaho, on this.....day of....., A. D. 190.....

.....

(Endorsed:—)

Permit No. .....

To appropriate.....second-feet of water from..... ....

County, Idaho.

By..... ....

Proof of Completion of Works.

Deposition of Witness.

Received and filed..... .....

Permit No.....

Certificate of Completion of Works.

To All Whom It May Concern:

This is to certify that..... of....., County of....., and State of....., the holder.... of Permit No....., issued upon Application No..... bearing date of priority of....., authorizing the diversion of.....second-feet of the waters of ..... County of ....., State of Idaho at ....., for ..... purposes, ha.... fully complied with the provisions of the laws of the State of Idaho relating to the proof of completion of the works of diversion set out and described in said permit; that said works are adequate for diverting and conveying to the place of intended use .....second-feet of water; and that

the lands proposed to be irrigated by the use of said water are described as follows, to wit:.....
.....
.....

Witness my hand this.....day of....., A. D. 190.....

.....
State Engineer of the State of Idaho.

(Endorsed:—)
Permit No.....
Certificate of Completion of Works.

Dated....., 190.....
Stream.....
County.....
Amount.....
Date of priority.....
Recorded in book.....
of..... page.....

Permit No.....

Notice of Proof of Application of Water to Beneficial Use.

(This blank must be filled out by holder of permit and forwarded to the State Engineer at least 60 days before the time set for application of water.)

(P. O.).....
(Date).....

To the State Engineer of the State of Idaho, Boise, Idaho:

Dear Sir—Notice is hereby given that at.....M. on the ..... day of ....., 190..., at..... County of....., State of Idaho, before..... proof will be submitted of the application to beneficial use of.....cubic feet per second of the waters of.....in accordance with the terms

and conditions of Permit No..... heretofore issued by the State Engineer of the State of Idaho.

1. The name and postoffice address of the person or corporation holding said permit are.....

2. The use to which said water has been applied is ....

3. The amount applied to beneficial use is..... ....

4. The place where said water is used is (if for irrigation, give full and accurate description of the lands irrigated)..... ....

5. The name of the canal or ditch or other works by which said water is conducted to such place of use is ....

6. The right to take the water from such works is based upon Permit No. .....

7. The source of supply from which such water is diverted is..... ....

8. The date of the priority which said user is prepared to establish is.....

I desire that the above notice be published, according to law, in the.....of....., published in the county in which said water is to be used; the expense of which publication will be borne by me.

(Sign).....

(Endorsed:—)

No. .....

Notice of Proof of Application of Water.

Received..... ....

Date of Proof..... ....

Place..... ....

Notice sent to..... ....

for Publication on..... .....

Notice for Publication.

Notice of Proof of Application of Water to Beneficial Use.

Notice is hereby given that on the.....day of....., 190...., at ....., County of....., State of Idaho, proof will be submitted of the application to beneficial use of..... cubic feet per second of the waters of..... in accordance with the terms and conditions of Permit No....., heretofore issued by the State Engineer of the State of Idaho.

1. The name and postoffice address of the person or corporation holding said permit are.....

2. The use to which said water has been applied is ....

3. The amount applied to beneficial use is..... ....

4. The place where said water is used is (if for irrigation, give full and accurate description of the lands irrigated)..... ....

5. The name of the canal or ditch or other works by which said water is conducted to such place of use is ....

6. The right to take the water from such works is based upon Permit No.....

7. The source of supply from which such water is diverted is..... ....

8. The date of the priority which said user is prepared to establish is.....

Permit No.....

Proof of Application of Water to Beneficial Use.

Deposition of Holder.

Ques. 1. State your name, age, residence, occupation and postoffice address.

Ans.....

Ques. 2. If acting in behalf of a corporation, state its name, principal place of business (if a foreign corporation, give name and postoffice of statutory agent), your position with reference to same, and your authority for appearing in its behalf.

Ans.....

Ques. 3. State number and date of permit, and date of priority you propose to establish under the permit.

Ans.....

Ques. 4. State source of water supply and give exact location of point of diversion.

Ans.....

Ques. 5. Describe your works of diversion, and state amount of water they are capable of conveying from point of diversion to place of use, and give name of canal or ditch or other works by which water is conducted to such place of use.

Ans.....

Ques. 6. State for what purpose water is used and describe place of use. (If for irrigation, name each subdivision in which used, and number of acres in each subdivision that have actually been irrigated with said water.)

Ans.....

Ques. 7. If for other than irrigation purpose, state how applied, amount of horse-power generated, etc.

Ans.....

Ques. 8. What is the minimum amount of water required for the use specified above?

Ans.....

Ques. 9. If you are not the person or representative of the corporation to whom above-mentioned permit was originally issued, please state how ownership was acquired by present holder.

Ans.....

Ques. 10. State when, how, in what amount and to what extent the water diverted under above-mentioned permit has been used.

Ans.....

(Sign) .....

I hereby certify that the foregoing testimony was read to the above subscriber before its signing, that I believe him to be the person he represents himself to be, and that said testimony was subscribed and sworn to before me, at my office in....., County of....., State of Idaho, on this.....day of....., A. D. 190.....

.....

.....

(Endorsed:—)

Permit No.....

Proof of Application of Water to Beneficial Use.

Deposition of Holder.

Amount of water.....second-feet

Source.....

County.....

Purpose.....

Place of use.....

Date of priority.....

Received and filed.....

The deposition of two witnesses on this form taken separately required in each case.

Permit No.....

Proof of Application of Water to Beneficial Use.

Deposition of Witness.

Ques. 1. State your name, age, residence, occupation and postoffice address.

Ans.....

Ques. 2. Are you acquainted with..... the holder of Permit No.....? How long have you known him, and where does he reside?

Ans.....

Ques. 3. Have you read or heard read said Permit No....., and you are familiar with its provisions and conditions?

Ans.....

Ques. 4. State source of water supply, place of diversion, and describe works for conveying water from point of diversion to place of use.

Ans.....

Ques. 5. How many second-feet of water do you estimate said works will safely conduct to place of use, and how much water have you seen being so conveyed?

Ans.....

Ques. 6. State for what purpose water is used and at what place. (If for irrigation, give each subdivision in which water has been used and number of acres irrigated in each subdivision.)

Ans.....

Ques. 7. If for power or other purposes than irrigation, state how water has been applied and to what extent.

Ans.....

Ques. 8. (If for irrigation) State character of land

that has been reclaimed, and give your estimate of the amount of water required for its profitable cultivation.

Ans.....

Ques. 9. Have you any interest in the works, water or lands above mentioned? If so, in what way and to what extent?

Ans.....

Ques. 10. State when, how, in what amount and to what extent you have witnessed the application to beneficial use of the water diverted under said permit.

Ans.....

(Sign) .....

I hereby certify that the foregoing testimony was read to the above subscriber before its signing, that I believe him to be the person he represents himself to be, and that said testimony was subscribed and sworn to before me, at my office in....., County of....., State of Idaho, on this.....day of....., A. D. 190.....

.....

.....

(Endorsed:—)

Permit No.....

Proof of Application of Water to Beneficial Use.

Deposition of Witness.

Received and filed.....

State of Idaho.

Water License No.....

WHEREAS, On the.....day of....., A. D. 190..., of....., County of....., and State of....., duly made application (No. .....) to me for a permit to use.....

cubic feet per second of the waters of....., County of....., State of Idaho, for..... purposes; and,

WHEREAS, On the.....day of....., A. D. 190..., Permit No..... was issued to said applicant... for the diversion of said water, and providing for the completion of the works of diversion therein described on or before the.....day of....., A. D. 19...., and for the application to beneficial use of said water on or before the ..... day of ....., A. D. 19....; and,

WHEREAS, On the.....day of....., A. D. 19...., the holder.. of said permit duly made proof of the completion of adequate works for the diversion of.....cubic feet per second of said waters, as evidenced by my Certificate No....., dated ....., confirming the completion of works of sufficient capacity for diverting and conveying to the place of intended use.....cubic feet per second of water, with date of priority of.....and,

WHEREAS, On the.....day of....., A. D. 19...., proof was duly made of the application to beneficial use of.....cubic feet per second of said water;

NOW, THEREFORE, By virtue of the authority vested in me by the laws of the State of Idaho, I hereby grant and confirm to..... of....., the holder.. and owner.. of said Permit No....., a perpetual right, dating from....., to the use of.....cubic feet per second of the waters of....., in the County of ....., and State of Idaho, or so much thereof as may be necessary for the purposes hereinbelow mentioned, to be diverted at.....and conducted to and upon.....for the pur-

pose.. of..... .....
subject, however, to the laws of the State of Idaho applicable to a license for the use of the waters of the State, and subject, also, to the local or community customs, rules and regulations which have been or may be adopted from time to time by a majority of the users from a common source of supply, canal or lateral from which such water may be taken, when such rules and regulations have for their object the economical use of such water.

Witness my hand and the seal of my office, at Boise, Idaho, this.....day of ....., A. D., Nineteen Hundred and.....

.....

State Engineer.

(Endorsed:—)
State of Idaho.
Water License No.....

To..... ....
Source of Supply ....
....County.
Amount ....Sec. Feet.
Point of Diversion..... ....
Place of Use..... ....
Purpose..... ....
Date of Priority..... ....
Recorded..... ....
in Book..... of ..... Page.....

Application for Transfer of Water Right.

State of Idaho, } ss.
County of..... }

...., being first duly sworn, deposes and says:

That his name is.....; that he is of lawful age, a citizen of the United States and of the State of Idaho, and that his postoffice address is

....

That he is the owner and using a certain water right of .....of the waters of....., County of....., State of Idaho, decreed to.....by decree of Judge....., of the.....Judicial District of the State of Idaho, in and for the County of....., in the case of.....vs....., said decree bearing date of..... (or obtained by virtue of License No....., issued by the State Engineer of the State of Idaho, dated.....), for the purpose of irrigating the following described lands situate, lying and being in the County of..... and State of Idaho, to wit:.....

.....and am the person (or corporation) to whom such right so issued, or have become the owner thereof in the following manner, i. e.....

....

as per abstract of title of said water right hereto attached and made a part of this statement;

That said waters are now diverted from said stream at

....

and conducted to the above described lands through

....

as per map hereto attached and of this affidavit made a part;

That affiant and petitioner desires to abandon the use of.....of said water upon the above described land, and to convey and use same upon the following tract, situate, lying and being in the County of.....and State of Idaho, to wit: ....

That his reasons for desiring to make such transfer are as follows: .....

That he intends to divert and convey said..... .... of water to the tract of land last above described in the following manner, to wit:..... as set forth upon the map hereto attached; and

That no one will be injured by such transfer.

Wherefore, Affiant and Petitioner prays that the State Engineer of the State of Idaho shall issue to him the proper certificate authorizing such transfer, and give proper notice of the same to the Water Commissioner of this Division, in accordance with the provisions of Section 11, House Bill No. 146, of the Laws of the Seventh Session of the Legislature of the State of Idaho.

.....

Subscribed and sworn to before me this..... day of....., A. D.....

.....

.....

State of Idaho, }
County of..... } ss.

....and..... .....being first duly sworn, each for himself, and not one for the other, deposes and says: That he is a citizen of the United States and of the State of Idaho, residing at .....that he is a user of water from....., County of....., State of Idaho; that he has read or heard read the foregoing affidavit and petition of ....., and is familiar with its allegations, and with the water right and lands therein mentioned and described and is not in any way interested in either, nor in any way related to said petitioner; that the statements and allegations therein made are true of his own

knowledge; and that no one will be injured by the granting of the certificate authorizing the transfer therein petitioned.

.....

.....

Subscribed and sworn to before me this..... day of....., A. D. 190....

.....

.....

State of Idaho, } ss.
County of.... }

I,..... ....., Watermaster of....., County of....., State of Idaho, whose post-office address is....., have read or heard read the foregoing affidavit and petition of....., and, of my own knowledge, believe the same to be true as to all matters therein alleged, and that no one will be injured by the transfer prayed to be authorized; and I hereby indorse my approval of said petition, and request that the State Engineer will issue the certificate of transfer as petitioned; or (do not approve of the issuance of the certificate of transfer prayed for) for the following reasons:..... ....

.....

Watermaster.

.....

.....

Notice having been duly published for thirty days of the intention of the above-named.....to apply to the State Engineer of the State of Idaho for a certificate authorizing the transfer of water as set forth in his affidavit and petition herein, and an opportunity having been given to any and all persons opposing said transfer to present their objections in a public hearing

before me at....., on....., according to the terms of said notice;

And it not appearing at said hearing that anyone would be materially injured by such transfer:

I hereby recommend that the said State Engineer of the State of Idaho issue his certificate to said applicant, authorizing the transfer as prayed for in his petition; or (and it appearing at said hearing that the following injuries would be sustained by others if such transfer is permitted..... ...., I hereby recommend that the State Engineer do not issue the certificate authorizing the transfer sought hereinabove.)

....

Commissioner of Water Division No.....

By..... ....

(Endorsed:—)

No.....

Application for Transfer of Water Right.

From..... ....

To..... ....

Stream..... ....

County..... ....

....Applicant.

Received..... ....

Approved..... ....

Certificate No.....issued..... ....

and recorded in Book.....of Transfers, at page.....

Notice of Proposed Transfer of Water Right.

Notice is hereby given that.....of ....., has applied to the State Engineer of the State of Idaho for a certificate authorizing him to transfer the use of.....of the water of

.....from the land upon which it is now used, i. e..... to the following described tract:.....

And that, on the.....day of....., A. D. 190..., at.....before the Water Commissioner of this Division, or his authorized agent, the opportunity will be given to any and all persons to appear and present for his consideration any reason or reasons why a certificate should not be issued authorizing such transfer.

Full details of the proposed transfer may be obtained from....., Watermaster of said stream.

NEBRASKA.

Permit No.....

Water Division, No..... District, No.....

The above to be filled out at the office of the Board.

Application for a Permit to Appropriate the Waters of the State of Nebraska.

I,..... .....of the
Name of person signing application.
.....County of
City or Village of which a resident.
.....State of..... .....being
Name of County. Name of State.
duly sworn, upon my oath say:

1st.—That the name of the applicant herefor is ..... Post-
Name of person or company for whom application is made.
office Address, No.....Street,
Number and Street.
.....County,.....
City or Village. County. State.

2d.—That it is proposed to use the water applied for herein, for.....
State the purpose for which water is to be appropriated.

3d.—That the name adopted for the proposed ditch or canal is the.....
Name of the canal.

4th.—That the source of the proposed appropriation is.....
Name of creek or river from which water is to be taken.

5th.—That the amount of the appropriation desired is.....cubic feet per second
Number of cubic feet.
of time.

6th.—That it is proposed to locate the headgate on the.....bank of the stream,
North, South, East or West.
in.....of sec-
Describe lot or forty acres in which situated.
tion....., Township..... Range
Number. Number.
.....of the.....Principal
Number, East or West. Number.
Meridian.

7th.—That the said ditch or canal will be.....
.....miles in length, and pass through the
Number of miles.
following sections of land, as shown on the accompanying township plats, viz.:

.....
Describe each section through which canal passes, stating Township and Range.

8th.—That the dimensions of the proposed ditch or canal will be as follows: HEADGATE—width in clear
.....feet; depth of water on floor at
Number of feet.
low water.....feet.
Depth in feet.

CANAL OR DITCH.

Location.	Depth.	Width on Bottom.	Width on Top.	Grade per Mile.
Below headgate..	feet.....	feet.....	feet....	feet.
At.... mile.....	feet.....	feet.....	feet....	feet.
At.... mile.....	feet.....	feet.....	feet....	feet.
At.... mile.....	feet.....	feet.....	feet....	feet.
At.... mile.....	feet.....	feet.....	feet....	feet.

Give dimensions at each point where reduced in size, stating miles from headgate.

9th.—That the material to be removed amounts to
.....cubic yards, consisting of
Number of yards.

.....
State character of material to be moved; whether rock, boulders, sand, clay, etc.

and that the total length of fluming required is.....
.....feet.
Number of feet.

10th.—That the estimated cost of the proposed construction is as follows: Earthwork, $..... Fluming, $..... Headgate, $..... Other expenses, $..... Total, $.....

11th.—That the proposed ditch or canal is to be built with the intention of supplying water to irrigate the following sections or quarter-sections of land, viz.:

....
Give sections and quarter-sections, stating Number, Township, and Range.

amounting in all to.....acres.
Total number of acres.

12th.—That construction is to be begun within .....of the date hereof, and
Number of days or months.
the proposed works are to be completed on or before
....
State day, month, and year.

13th.—That the time estimated as necessary to provide for the application of the amount of water herein applied for to the beneficial use above stated is .....years from..... 190....
Number of years. Month and day.

14th.—That the relation which the subscriber to this affidavit bears to said ditch, or canal, or other work, is that of..... .....and
State whether owner, manager, superintendent, etc.
that he is authorized to make this affidavit in behalf of the interests affected.

.....
Signature.

State of.....
County of.... } ss.

I hereby certify that the foregoing application was signed in my presence and sworn to before me by ....this.....day of..... 190....

[Seal.] .....

Notary Public.

State of Nebraska,
Office State Board of Irrigation. } ss.

This is to certify that the foregoing application has been examined..... ....

STATE BOARD OF IRRIGATION,

.....

State Engineer, Secretary.

This is to certify that the foregoing application has been examined and is hereby granted subject to the following limitations and conditions:

1st. The work of excavation or construction shall begin on or before.....190.....

2d. The time for completing the work of construction shall extend to.....190.....

3d. The time for completing the application of water to the beneficial use indicated shall extend to..... 190.....

4th. The water appropriated shall be used for the purpose of irrigation.

5th. The prior right of the owners of land bordering on this stream, or through which this stream flows, to so much of the natural flow of the stream as is necessary for domestic uses, including stock water, must be respected.

6th. The prior rights of all persons who, by compliance with the laws of the State of Nebraska, have acquired a right to the use of the waters of this stream must not be interfered with by this appropriation.

7th. The amount of the appropriation shall not exceed.....cubic feet per second of time; neither shall it exceed the capacity of said ditch or canal, nor the least amount of water that experience may hereafter indicate as necessary for the production of crops in the exercise of good husbandry; and, further, said appropriation, under any circumstances, shall be limited to one-seventieth (1-70) of a cubic foot per second of time, for each acre of land to which water is actually and usefully applied, on or before.....

STATE BOARD OF IRRIGATION.

.....

State Engineer, Secretary.

Approved..... .....190.....

(Endorsed:—)

No.....

Division No.....District No.....

Application for a Permit to Appropriate the Waters of the State of Nebraska.

State of Nebraska,
Office State Board of Irrigation, } ss.

This instrument was filed for record at.....
o'clock.....noon, on the.....day of.....
190.... and duly recorded in Book.....of the Record of Applications for Appropriations on Page.....

.....

State Engineer, Secretary.

Township Plats—Showing Line of Ditch or Canal.

(This accompanies the application for permit.)

The following township plats,.....in number, show where the said ditch or canal heads, and where it crosses each quarter-section of land along the line of its course.

No. filled out.

.....

Signature of person signing application.

NOTICE.—The blanks for No. of Township, Range, etc., at top of blank plats, must be properly filled out. Plat No. 1 should be used in which to locate the head of the canal, and Plats No. 2, No. 3, etc., must be used in their order for each successive township into which the canal enters. All tracing, lettering, etc., must be done in ink, free from blurs or blots. If four blank plats are not sufficient to show the entire line of the canal, a special additional blank will be furnished free of charge, upon application to the office of the State Board.

(Here follows township plat in the usual form as shown on page 516 below. Enough plats must be used to show the whole ditch in all townships into which it extends.)

(The following is accompanied by township plats similar to those in the preceding form.)

Claim, No..... Priority, No.....

Water Division, No..... District, No.....

(The above to be filled out at the office of Board.)

Claim for the Waters of the State of Nebraska.

(For Adjudication of Existing Priority.)

I,.....of the

(Name of person signing claim.)

.....County of.....

(City or Village of which a resident.) (Name of County.)

State of.....being duly sworn, upon my

(Name of State.)

oath say:

1st.—That the name of the claimant is.....
.....Postoffice Address,
(Name of person or company for whom claim is made.)
No..... Street,.....
(Number and Street.) (City or Village.) (County.)
County,.....
(State.)

2d.—That the water is claimed for the purpose of
.....
(State the purpose for which water is claimed.)

3d.—That the name adopted for the ditch or canal is the.....
(Name of the ditch or canal.)

4th.—That the source of the appropriation claimed is
.....
(Name of creek or river from which water is claimed.)

5th.—That the amount of the appropriation claimed is.....cubic feet per second of time.
(Number of cubic feet.)

6th.—That the headgate is located on the.....
(North, South,
.....bank of the stream, in .....
East, or West.) (Describe lot or forty
.....of Section....., Township.....,
acres in which situated.) (Number.) (Number.)
Range..... .....of the.....Principal
(Number, East or West.) (Number.)
Meridian.

7th.—That the said ditch or canal,.....
(Number of miles.)
miles in length, passes through the following sections of land, as shown on the accompanying township plats, viz.:

.....
(Describe each section through which canal passes, stating Township and Range.)

(a) That the portion of said ditch or canal,.....
.....miles in length, indicated on said plats by a
(Number of miles.)
black line is completed.

(b) That the portion of said ditch or canal,.....
.....miles in length, indicated on said plats by a
(Number of miles.)
red line is not completed.

8th. That the dimensions of said ditch or canal are (and will be for the uncompleted portions) as follows: HEADGATE—width in clear.....feet;
(Number of feet.)
depth of water on floor at low water.....feet.
(Depth in feet.)

CANAL OR DITCH.

Location.	Depth.	Width on Bottom.	Width on Top.	Grade per Mile.
Below headgate..	feet.....	feet.....	feet....	feet.
At.... mile.....	feet.....	feet.....	feet....	feet.
At.... mile.....	feet.....	feet.....	feet....	feet.
At.... mile.....	feet.....	feet.....	feet....	feet.
At.... mile.....	feet.....	feet.....	feet....	feet.
At.... mile.....	feet.....	feet.....	feet....	feet.
At.... mile.....	feet.....	feet.....	feet....	feet.

(Give dimensions at each point where reduced in size, stating miles from headgate.)

9th.—That the total excavation amounts to.....
.....cubic yards of material, consisting of.....
(Number of yards.)
.....and that the total
(State character of material; whether rock, boulders, sand, clay, etc.)
length of fluming required is.....feet.
(Number of feet.)

(a) That the material thus far removed amounts to
.....cubic yards.
(Number of yards.)

(b) That the fluming completed amounts to.....
.....feet.
(Number of feet.)

10th.—That the estimated cost of said ditch or canal is as follows: Earthwork, $..... Fluming, $.....
Headgate, $..... Other expenses, $..... Total, $.....

(a) That the expenditures thus far incurred are as follows: Earthwork, $..... Fluming, $..... Headgate, $..... Other expenses, $..... Total, $.....

11th.—That it is the intention that the said ditch or canal shall supply water to irrigate the following sections or quarter-sections of land, viz.:.....

(Give sections and

.....

quarter-sections, stating number Township and Range.)

amounting in all to.....acres.

(Total number of acres.)

12th.—That the actual work of excavation and construction was begun on the.....day of .....18...., and the works.....

(Were, or will be.)

completed, and the appropriation perfected on or before the.....day of.....1.....

(a) That this claim is made, under and by virtue of rights deemed to have been acquired by.....

(State whether

.....

by application of water to a beneficial use without objection, or by

.....

posting notice and filing same with County Clerk, as prescribed by

.....

law. If by use, state nature, date of commencement, and period of

.....

duration; if by filing, state date of posting notice, date of record, and

.....

where recorded.)

(b) That water.....turned into said

(Was, or will be.)

ditch or canal on or before the.....day of .....18....

13th.—That the time estimated as necessary to provide for the application of the amount of water herein

claimed to the beneficial use above stated, is.....
.....years from April 4th, 1895.
(State number of years.)

(c) That there were.....acres of crops
(Number of acres.)
actually irrigated from said ditch or canal during 189....

(d) That it is estimated that there will be.....
.....acres of crops irrigated from said ditch or
(Number of acres.)
canal during 189....

14th.—That the relation which the subscriber to this affidavit bears to said ditch or canal, or other work, is that of..... .....and
(State whether owner, manager, superintendent, etc.)
that he is authorized to make this affidavit in behalf of the interests affected.

.....
(Signature.)

State of.....
County of..... } ss.

I hereby certify that the foregoing claim was signed in my presence and sworn to before me by.....
this.....day of.....189...

[Seal.] .....
Notary Public.

NOTICE.—The above claim affidavit must be signed and sworn to by some person closely related in interest (or having authority, delegated or otherwise, to make affidavit), to the ditch, canal, or other work in question; preferably by the owner or president, secretary, or manager of the company controlling same.

Too much care cannot be exercised in the preparation of this affidavit, as it is the foundation for all additional testimony that will be taken (upon the ground) by under Secretaries, to complete the record from which the Board will determine the rights and priority of the claimant. Therefore, generalities must be avoided, and all facts required carefully determined and accurately stated.

This affidavit must be filed at the office of the State Board of Irrigation within.....days from .....189 . Delay and neglect will jeopardize the rights of claimants.

Proposed extensions and enlargements of canals, ditches, or other works, not protected by new filings made previously to April 4th, 1895, must not be included in the above claim. Individuals or corporations, desiring to make such extensions or enlargements, must make application for a permit from the State Board, as provided by the Statute now in force.

(Endorsed:—)

Claim, No..... Priority, No.....

Division, No..... District, No.....

Claim for the Waters of the State of Nebraska.

State of Nebraska,
Office State Board of Irrigation. } ss.

This instrument was filed for record at..... o'clock,.....noon, on the.....day of..... 189...and duly recorded in Book.....of the Record of Claims for Appropriations on Page.....

.....

State Engineer, Secretary.

NEVADA.

No.....

Application for Permit

To Appropriate the Public Waters of the State of Nevada.

1. Name of Applicant..... .....
   Postoffice Address: P. O..... .....
   County..... ....
   I. If applicant is a corporation, give
      (a) Date and place of corporation.....
      (b) The amount of capital stock.....
      (c) The amount paid in..... .....
      (d) The names and addresses of Directors
      .....
2. The quantity of water claimed is.....cubic feet per second.
3. Source of water supply..... ....
4. Location of point of diversion.....
5. To be used for:
   I. Irrigation and domestic use:
      (a) Number of acres to be irrigated..... acres.
      (b) In the following legal subdivisions
      ....
      (A list of lands to be irrigated may be ap-
      ....
      pended as a part of this application.)
   II. Mining, power, manufacturing or transportation purposes:
      (a) To be used for.....
      (b) Amount of power to be generated .....horse power.

(c) At what point.....

(d) If water is to be returned to stream ("yes" or "no").....

(e) If "yes" at what point.....

6. Estimated cost of works.....

7. Description of works for diversion:

I. Kind of works (reservoir, dam, ditch, flume, pipes or otherwise).....

II. Dimensions of works:

(a) Height of dam,.....feet; length of dam at top,.....feet; length of dam at bottom,.....feet; material used in construction (wood, earth, stone or concrete).....

(b) Capacity of reservoir.....acre-feet.

(c) Size of headgate—width,.....feet; height,.....feet.

(d) Ditch (flume or pipe)—width at bottom,.....feet; width at water line,..... feet; depth of water, ...feet. Average grade per mile is....feet. Length of ditch is..... miles, and it crosses the following quarter sections:..... .....to .....which is the point of intended use.

Remarks.

(This space not to be written in by applicants.)

.....

.....

A *Plat* showing line of ditch, etc., accompanies this application, as shown on page 515 below.

Notice of Application for Permission to Appropriate the Public Waters of the State of Nevada.

Notice is hereby given that on the.....day of ....., 190..., in accordance with Section 23, Chapter XLVI, of the Statutes of 1905, one..... of....., County of.....and State of....., made application to the State Engineer of Nevada for permission to appropriate the public waters of the State of Nevada. Such appropriation is to be made from .....at points..... by means of.....and.....cubic feet per second is to be conveyed to points..... by means of.....and there used..... The construction of said works shall begin before..... and shall be completed on or before..... The water shall be actually applied to a beneficial use on or before.....

Signed:

.....

State Engineer.

Approval of State Engineer.

The number of this permit is.....

Date of first receipt of application....., 190....

Returned to applicant for correction....., 190....

Recorded in Book.....page.....Approved....., 190.....

This is to certify that I have examined the within application for a permit to appropriate the public waters of the State of Nevada and hereby grant the same, subject to the following limitations and conditions:

One-fifth of the work above specified to be completed on or before.....

The whole of said work to be completed on or before .....

The time for the proof of beneficial use of water appropriated in accordance herewith, to extend to.....

Witness my hand this.....day of....., 190....

.....

State Engineer.

NOTE.—The State Engineer of Nevada writes under date of August 30, 1905: "The law concerning new appropriations of water was passed by the last legislature, and I have not yet adopted forms for the proof of these appropriations."

(The following form is used in establishing the priority of existing rights.)

The State of Nevada.

Proof of the Appropriation of Water.

.....

State your name.....

1. Q. Postoffice.

   A.....

2. Q. State the use to which the water has been applied.

   A.....

3. Q. State the means of diversion employed.

   A.....

4. Q. If through a ditch state its name.

   A.....

5. Q. (a) State date of survey of the ditch or other distributing works through which the water

claimed is diverted. (b) The date when the construction of such ditch was begun and when completed.

A. (a).....

(b) .....

6. Q. If any enlargements were made state the date when begun and the date when completed.

A.....

7. Q. State dimensions of the ditch as originally constructed, and as enlarged.

A.....

8. Q. State the name of person, association of persons or corporations who built the ditch or canal, and the name or names of its present owners.

A.....

9. Q. State the nature of your title to the land for which an appropriation is claimed, and if not owned by you give the name of the owner and the nature of the possessory right which you exercise.

A.....

10. Q. State the year when water was first used for irrigation or other beneficial purposes, and by whom. If for irrigation, give the number of acres watered the first year, with the legal subdivisions on which the water was used, and as near as may be the acres irrigated in each legal subdivision.

A.....

11. Q. State the number of acres watered each subsequent year, and give the legal subdivisions on which the water was used, and as near as may be the acres irrigated in each legal subdivision.

A.....

12. Q. If water is claimed for irrigation, give the legal subdivisions of land owned or controlled by you for which an appropriation is claimed.

A.....

13. Q. State the acreage said ditch is capable of watering, give the legal subdivisions of land which it can be made to irrigate, and state who owns said land.

A.....

14. Q. State the character of the soil and the kind of crops cultivated.

A.....

15. Q. Are you an owner in said ditch? If so state your proportionate interest therein.

A.....

16. Q. The plat prepared by the State Engineer is hereby accepted as showing correctly the location of the.....Ditch and the land which can be irrigated therefrom.

A.....

17. Q. When does your irrigation season begin and when does it end?

A.....

18. Q. If water is used for other purposes than irrigation, state the nature of such use, the time when such use began, and how much water is required for such purpose.

A.....

19. Q. During what months is the water used?

A.....

20. Q. Have you had sufficient water each year since the use for which an appropriation is claimed began? If not, state the years of scarcity, the months when the supply was insufficient, and the reason of such scarcity.

A.....

Signed:

.....

....., Nevada,....., 190...

Sworn to and subscribed before me at....., this.....day of....., 190....

.....,

Notary Public.

Remarks:..... ....

....

....

(Endorsed:—)

Proof of Appropriation.

Date of Appropriation..... .....

PRIORITIES.

General..... ....

Stream..... ....

Name of Stream..... ....

Tributary of..... ....

Name of Claimant..... .....

Filed in this office this.....day of....., 190....

....

State Engineer.

(The following form is issued to existing owners who have established their priority.)

The State of Nevada.

Certificate of Appropriation of Water.

CERTIFICATE RECORD.....PAGE.....

WHEREAS,..... .....has presented to the State Engineer of the State of Nevada proof of appropriation of water from.....through the..... .....Ditch for irrigation of the lands herein described, lying and being in.....County, Nevada, and for..... ....

NOW KNOW YE, That the State Engineer, under the provisions of Section 13, Chapter 4, Statutes of Nevada, 1903, has determined the priority and amount of such appropriation as follows:

Name of Appropriator.....; Postoffice Address ....., Nevada. General Priority Number on main stream.....; Priority Number on..... Amount of Appropriation,.....acre-feet per year; Amount of prior appropriations,.....acre-feet per year; Date of Appropriation.....; Description of land to be irrigated, and for which this appropriation is determined.....

The right to water hereby determined is limited to irrigation.....and the use is restricted to the place where acquired and to the purpose for which acquired; rights for irrigation not to exceed three acre-feet per year for each acre of land for which appropriation is herein determined.....

IN TESTIMONY WHEREOF, I,....., State Engineer, have hereunto set my hand this..... day of....., A. D. 190....

.....

State Engineer.

NORTH DAKOTA.

No.....

Water Division No..... District No.....

[Blanks to be filled by the State Engineer.]

Application for a Permit

To Appropriate Water Within the State of North Dakota.

[NOTE.—Draw a line through items not applicable.]

1. Name of applicant..... .....
Postoffice address....., County....., State.....

I. If a corporation:

(a) Name of same.....

(b) Date and place of incorporation.....

(c) Amount of capital stock.....

(d) Amount paid in.....

(e) Names and addresses of directors:

....

[NOTE.—A certified copy of articles of incorporation must accompany the application.]

II. Method of accomplishing the work and financial resources of the applicant:

(a) Method of accomplishing the work. (Whether by contract, employment of others, or by direct labor).....

(b) Cash on hand, $..... (c) Treasury stock, $.....

(d) Bonds to be issued, $..... (e) Other resources, $.....

2. Name of diversion works..... .....

3. Quantity of water claimed...cubic feet per second.

4. Source of water supply.....

5. Location of point of diversion.....

....on.....bank.

(Right or left bank looking down stream.)

6. Annual periods during which water is to be used

....

7. To be used for:

I. Irrigation or domestic use:

(a) Number of acres to be irrigated..... acres.

(b) Legal subdivisions to be irrigated.....

[NOTE.—A list of lands to be irrigated, giving each subdivision and fraction with acreage thereof, should be written here, or may be appended as a part of this application. Same must also be shown on accompanying map.]

(c) Statement as to domestic use (giving location, etc.).... .....

II. Mining, power, manufacturing, transportation, or other purposes:

(a) Nature of use..... .....

(b) Amount of power to be generated..... horse-power.

(c) Location of plant..... .....

(d) Method of developing power.....

(e) Point where water will be returned to stream..... ....

8. Estimated cost of works:

(a) Headgates, $..... (b) Pumping plant, $.....

(c) Fluming, $..... (d) Canal—earth, $..... rock, $.....

(e) Other structures.....$..... Total, $.....

9. Description of diversion works:

I. Nature of works: (Reservoir, dam, ditch, flume, pumping plant, etc.).....

II. Dimensions of works:

(a) Dam: Height.....feet; length at bottom.....feet; length at top..... feet; thickness at bottom.....feet; thickness at top.....feet; slope of front (water) face.....; slope of back face.....; material used in construction..... ....

(b) Reservoir: Capacity when filled..... acre-feet. Surface area at high-water mark.....acres.

Depth at Outlet—Feet	Surface Area at Each.....Feet of Depth at Outlet—Acres	Capacity—Acre-feet
.....	.....	.....
.....	.....	.....
.....	.....	.....

(c) Headgate: Width.....feet; height .....feet; Material.... .....

(d) Canal: Total length.....miles.

Location Below Headgate	Depth	Width at Water Bottom Width	Line	Grade per Mile
At.....	mile.....	feet.....	feet.....	feet..... feet
At.....	mile.....	feet.....	feet.....	feet..... feet
At.....	mile.....	feet.....	feet.....	feet..... feet
At.....	mile.....	feet.....	feet.....	feet..... feet
At.....	mile.....	feet.....	feet.....	feet..... feet

[Give dimensions where reductions in size are made.]

10. Time required for completion of work.....years.

11. Time required for complete application of water to the proposed beneficial use.....years.

12. Choice of newspaper for publication of notice of intention to appropriate..... ....

State of North Dakota, }
County of..... } ss.

I,..... ...., being first duly sworn on my oath, depose and say: That my relation to the above-described undertaking is that of.....,
(Owner, manager or engineer)
that I have read the above and foregoing statement, and examined the map accompanying the same, and that I know of my own personal knowledge that the matters therein stated and shown are true.

Signed..... ....

Subscribed and sworn to before me this.....day of.....190...

....
Notary Public (or other qualified officer).

Remarks (by State Engineer):

....
....
....

State of North Dakota, }
County of..... } ss.

Bismarck, N. Dak.,.....190....

This is to certify that the foregoing application was received at this office at.....o'clock.....M. upon the.....day of....., 190..., and that after examination it was..... ....

.....
State Engineer.

By..... ....
Deputy.

Number of Permit.....
Date of first receipt of application.....190...
Date of return to applicant for correction.....190...
Date of receipt of corrected application.....190...
Date from which application may claim right....190...
Approved.....190.. Recorded in Book....Page....

This is to certify that I have examined the foregoing application for a permit to appropriate water of the State of North Dakota, and I hereby grant the same as stated herein, subject, however, to the following limitations and conditions:

1st. The equivalent of at least one-fifth of the work above specified is to be completed on or before....., 19.....

2d. The whole of said work is to be completed on or before....., 19.....

3d. The limit of time for proof of beneficial use of water appropriated in accordance herewith is....., 19.....

4th. The water appropriated shall be used for the purpose of.....

5th. The prior right of all persons who, by compliance with the laws of the State of North Dakota, have acquired a right to the use of water must not be injuriously affected by this appropriation.

6th. The amount of appropriation herein granted shall not exceed.....cubic feet of water per second of time; neither shall it exceed the capacity of the above-described system of diversion works, nor the least amount of water that experience may hereafter indicate as necessary for the production of crops in the exercise of the best husbandry; and further, said appropriation must be limited to not more than one-eightieth (1-80) of one cubic foot of water per second of time for each acre

of land to which water is actually and beneficially applied on or before....., 19....; said water to be used during the following described annual periods:

....

....

Witness my hand this.....day of..... 190....

....

State Engineer.

By..... ....

Deputy.

(Endorsed:—)

No.....

Division No..... District No.....

Permit

to appropriate water from.....county, North Dakota.

Name of applicant..... ....

Name of diversion works..... .....

Date of first receipt at office of State Engineer.....,

....190....

Returned to applicant for correction....., 190...

Corrected application received..... ....., 190...

Date of water right....., 190...

Recorded in book..... Page.....

One-fifth of work to be completed....., 19....

Whole work to be completed....., 19....

Final proof of use of water..... ....., 19....

Approved....., 190....

....

State Engineer.

By..... ....

Deputy.

No.....

Water Division No..... District No.....

[Blanks to be filled by the State Engineer.]

Application for a Permit—Enlargement.

[NOTE.—Draw lines through items not applicable. Where not otherwise stated all items refer to the proposed enlargement or extension.]

1. Name of applicant..... ....
   Postoffice address....., County....., State.....
   I. If a corporation:
      (a) Name of same..... .....
      (b) Date and place of incorporation.....
      (c) Amount of capital stock.....
      (d) Amount paid in..... .....
      (e) Names and addresses of directors:
      ....

[NOTE.—A certified copy of articles of incorporation must accompany the application.]

   II. Method of accomplishing the work and financial resources of the applicant:
      (a) Method of accomplishing the work. (Whether by contract, employment of others, or by personal labor).....
      (b) Cash on hand, $..... (c) Treasury stock, $.....
      (d) Bonds to be issued, $..... (e) Other resources, $.....

2. Name of existing diversion works.....Permit No.....Name of enlargement or extension.....
   ... .
3. Quantity of water claimed by enlargement or extension.....cubic feet per second.
4. Source of water supply..... ....
5. Location of point of commencement of extension
   ....

6. Annual periods during which water is to be used ....

7. To be used for:

I. Irrigation or domestic use:

(a) Number of acres to be irrigated..... acres.

(b) Legal subdivisions to be irrigated.....

[NOTE.—A list of lands to be irrigated, giving each subdivision and fraction with acreage thereof, should be written here, or may be appended as a part of this application. Same must also be shown on accompanying map.]

(c) Statement as to domestic use (giving location, etc.)..... .....

II. Mining, power, manufacturing, transportation, or other purposes:

(a) Nature of use..... .....

(b) Amount of power to be generated..... horse-power.

(c) Location of plant..... .....

(d) Method of developing power.....

(e) Point where water will be returned to stream..... ....

8. Estimated cost of works:

(a) Headgates, $..... (b) Pumping plant, $.....

(c) Fluming, $..... (d) Canal—earth, $..... rock, $.....

(e) Other structures.....$..... Total, $.....

9. Description of diversion works:

I. Nature of works: (Reservoir, dam, ditch, flume, pumping plant, etc.).....

II. Dimensions of works:

(a) Dam: Height.....feet; length at bottom.....feet; length at top..... feet; thickness at bottom.....feet; thickness at top.....feet; slope of front (water) face.....; slope of back face.....; material used in construction..... ....

(b) Reservoir: Capacity when filled..... acre-feet. Surface area at high-water mark.....acres.

Depth at Outlet—Feet	Surface Area at Each..... ...Feet of Depth at Outlet—Acres	Capacity—Acre-feet
.....	....	.....
.....	....	.....
.....	....	.....

(c) Headgate: Width.....feet; height .....feet; Material.... .....

(d) Canal: Total length.....miles.

Location Below Headgate	Depth	Width at Water Bottom Width	Line	Grade per Mile
At..... mile.....	feet.....	feet.....	feet.....	feet
At..... mile.....	feet.....	feet.....	feet.....	feet
At..... mile.....	feet.....	feet.....	feet.....	feet
At..... mile.....	feet.....	feet.....	feet.....	feet
At..... mile.....	feet.....	feet.....	feet.....	feet

[Give dimensions where reductions in size are made.]

10. Time required for completion of work.....years.

11. Time required for complete application of water to the proposed beneficial use.....years.

12. Choice of newspaper for publication of notice of intention to appropriate..... ....

State of North Dakota, } ss.
County of..... }

I,..... ...., being first duly sworn on my oath, depose and say: That my relation to the above-described undertaking is that of.....,
(Owner, manager or engineer)
that I have read the above and foregoing statement, and examined the map accompanying the same, and that I know of my own personal knowledge that the matters therein stated and shown are true.

Signed..... ....

Subscribed and sworn to before me this.....day of.....190...

....
Notary Public (or other qualified officer).

Remarks (by State Engineer):

....
....
....

State of North Dakota, } ss.
County of..... }

Bismarck, N. Dak.,.....190....

This is to certify that the foregoing application was received at this office at.....o'clock.....M. upon the.....day of....., 190..., and that after examination it was..... ....

.....
State Engineer.

By..... ....
Deputy.

Number of Permit.....
Date of first receipt of application.....190...
Date of return to applicant for correction.....190...

Date of receipt of corrected application.....190...
Date from which application may claim right....190...
Approved.....190.. Recorded in Book....Page....

This is to certify that I have examined the foregoing application for a permit to appropriate water of the State of North Dakota, and I hereby grant the same as stated herein, subject, however, to the following limitations and conditions:

1st. The equivalent of at least one-fifth of the work above specified is to be completed on or before....., 19.....

2d. The whole of said work is to be completed on or before....., 19.....

3d. The limit of time for proof of beneficial use of water appropriated in accordance herewith is....., 19.....

4th. The water appropriated shall be used for the purpose of.....

5th. The prior right of all persons who, by compliance with the laws of the State of North Dakota, have acquired a right to the use of water must not be injuriously affected by this appropriation.

6th. The amount of appropriation herein granted shall not exceed.....cubic feet of water per second of time; neither shall it exceed the capacity of the above-described system of diversion works, nor the least amount of water that experience may hereafter indicate as necessary for the production of crops in the exercise of the best husbandry; and further, said appropriation must be limited to not more than one-eightieth (1-80) of one cubic foot of water per second of time for each acre of land to which water is actually and beneficially applied on or before....., 19....; said water to be used during the following described annual periods:

....
....

Witness my hand this.....day of.....
190....

....
State Engineer.

By..... ....
Deputy.

(Endorsed:—)

No.....

Division No..... District No.....

Permit

to appropriate water from.....county, North Dakota.
Name of applicant..... ....
Name of diversion works..... .....
Date of first receipt at office of State Engineer.....,
....190....
Returned to applicant for correction....., 190...
Corrected application received..... ....., 190...
Date of water right....., 190...
Recorded in book..... Page.....
One-fifth of work to be completed....., 19....
Whole work to be completed....., 19....
Final proof of use of water..... ....., 19....
Approved....., 190....

....
State Engineer.

By..... ....
Deputy.

Acknowledgment of Receipt of Application.

No.....

Bismarck,..... 190...

Your application dated.....190...for permit to appropriate water from.....through the .....together with a fee of $5.00 for the examination of same, the receipt of which is hereby acknowledged, was received this day and has been duly filed under the temporary number..... The application will be examined in regular order as soon as possible, after which you will be notified as to further action on your part.

Very respectfully,

....

State Engineer.

By..... ....

Deputy.

Notice of Intention to Appropriate Water.

No.....

(First Publication.....190....)

Appropriation of Water.

Office of the State Engineer,

Bismarck, N. D.,.....190...

Notice is hereby given that.....whose postoffice address is..... .....County, N. D., has made an application in accordance with the provisions of the irrigation laws of North Dakota for a permit to appropriate for beneficial use.....cubic feet of water per second of time from.....through

the....., the point of diversion of which is to be located upon the.....bank of said stream in the..... 1-4 of the....1-4 of section....township....range.... said water to be used for the purpose of..... upon the..... ....

This application will be taken up by the State Engineer at his office at Bismarck for consideration and appropriate action upon the.....day of..... 190...at 9 A. M., at which time all persons who believe that the prior rights would be injuriously affected, or that the allowance of the permit would be detrimental to the public welfare, and also parties making the application, and to be benefited, are notified to be present either by sworn affidavit or in person for the purpose of presenting any relevant testimony.

....

State Engineer.

No.....

Proof of Publication.

State of North Dakota, } ss.
County of..... }

.....being duly sworn, deposes and says that the annexed printed copy of Notice of Intention to Appropriate Water was taken from the .....a newspaper which, during the whole time of publication of said notice hereinafter stated, has been and is printed and published in the.....of ....., County of.....and State of North Dakota. That the said notice was published in said newspaper on the following dates:

....

in each and every issue of the full number thereof, com-

mencing on the.....day of.....190....., and ending on the.....day of.....190..., upon which days or times of publication aforesaid the newspaper was regularly published, and that during the whole time of said publication he was.....the printer.... and publisher....of the said newspaper.

....

Subscribed and sworn to before me this.....day of .....A. D. 190....

.....

Notary Public.....County, N. D.

Maps.

I. The map of a ditch shall show:

(a) Title, giving name of ditch or canal.

(b) Location of headgate, by course and distance to a government corner, or if on unsurveyed lands to some natural object so that the site can be easily found. True courses are to be used, the magnetic variations being also stated.

(c) Stream, and name thereof, from which water is diverted.

(d) Route and total length of ditch or canal.

(e) Lands crossed with names of owners thereof.

(f) Lands to be irrigated, with names of owners thereof.

(g) Locations, with elevations thereof, of bench marks at the headgate or other suitable points.

II. The map of the reservoir shall show:

(a) Title, giving name of reservoir.

(b) Location of initial point of survey, as in case of canal.

(c) The location of the dam, of the high-water line, and contour lines at appropriate intervals and both the area within the high-water line and the capacity of the reservoir when filled to the high-water line.

(d) Stream, with name thereof, from which reservoir derives its supply of water.

(e) Location of ditches to and from reservoir.

(f) Legal subdivisions and ownership thereof.

(g) Lands to be irrigated and ownership thereof.

(h) A bench mark outside of reservoir, this bench mark being referenced to the high-water line and other important elevations.

(i) The location of the outlet with reference to a government corner, or, if upon unsurveyed ground, to some natural object, or to the initial point of survey.

III. (a) Both ditch and reservoir maps shall have thereon a certificate of the engineer who made the survey, substantially as follows:

State of North Dakota,
County of..... } ss.

I,....., being duly sworn, upon my oath say, that I am the engineer of the.....; that the survey and map thereof were made by me (or under my direction), and that such survey is accurately represented upon this map; and that I have read the accompanying statement and know of my own knowledge that the statements therein made are true.

.....

Engineer (or surveyor).

Subscribed and sworn to before me this.....day of.....190...

.....

Notary Public (or other qualified officer).

NOTE.—The State Engineer of North Dakota has not yet outlined the method to be used in the transfer of water rights to use on different land, nor adopted certificates of completion of works, as there has been no need of such forms in this State up to the present time. It is expected that the matter will be taken up this winter.

UTAH.

Application to Appropriate Water for Power.

State of Utah.

....190....

For the purpose of acquiring the right to use a portion of the unappropriated water of the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of Chapter 108 of the Session Laws of Utah, 1905.

The Purpose for Which the Water is to be Appropriated is Power.

NOTE.—If it is intended to use the water for some purpose other than Irrigation, Power or Mining fill as many of the first fifteen blanks as are applicable, and then state the purpose for which it is to be used under the heading "Miscellaneous Purposes."

1. The name of the applicant is.....

2. The postoffice address of the applicant is.....

3. The flow of water to be used in cubic feet per second is.....

3a. The quantity of water to be appropriated is (See note under explanatory).....acre-feet.

4. The water is to be used each year from.....
MONTH DAY

to.....
MONTH DAY.

5. The water is diverted from.....
Name river system or drainage area.

in.....County.

6. The particular point at which the water is to be diverted is described as follows:

(NOTE.—If on a fork, branch, tributary or a feeder of said stream or source or an isolated spring in its drainage area name same, and give course and distance of "point of diversion" or "point of issuance" of spring to some U. S. land corner if within six miles of one, if not, to some prominent and permanent natural object.)

. . . . . .

7. The diverting works will consist of. . . . . .

8. The cross section of the diverting channel will be ⊔ ⌣ or ○

(Strike out ones not needed.)

9. The nature of the diverting channel will be: earthen, wooden, iron or concrete.

(Strike out ones not needed.)

10. The length of the diverting channel will be. . . . . feet.

11. The top width of the diverting channel will be (if a flume or ditch). . . . . feet.

12. The bottom width of the diverting channel will be (if a flume or ditch). . . . . feet.

13. The depth of water in the diverting channel will be (if a flume or ditch). . . . . feet.

14. The diameter of the diverting channel will be (if a pipe). . . . . feet.

15. The grade of the diverting channel will be. . . . . feet per mile.

16. The number of wheels employed in the development of power will be. . . . . .

17. The size of the wheels shall be. . . . . inches.

18. The make of the wheels will be. . . . . .

19. The wheels will operate under a head of. . . . . feet.

20. A total of. . . . . horse-power will be produced.

21. The power thus produced will be used for electric lighting and propelling machinery at. . . . . Utah.

22. After having passed through said wheels, the water will be returned to the natural stream or source at a point described as follows: (See note under No. 6.)

Miscellaneous Purposes.

....
....

Explanatory.

(Never use the blank 3a except when it is intended to store the water to be appropriated. In such cases the total quantity of water to be so stored should be given in acre-feet. The legal subdivisions of land covered by the reservoir should be named, and the periods of time during which the water is to be stored and released should be given in the space below. If the water is released from the reservoir into the natural channel of a stream the point where it is diverted from such stream should be described in blank No. 6, and the data given in blanks 7-15 inclusive should be relative to the works used to divert the water from the natural channel. All other works should be described under "Explanatory" except where the water is not stored in the natural channel of the stream supplying it. In such cases the "point of diversion" is the place where the water is taken from the supplying source, and should be described in blank No. 6, and blanks 7 to 15 inclusive should be used to describe the diverting works.)

The following additional facts are set forth in order to more clearly define the full purpose of the proposed application..... ....
....
....

(Signature of Applicant.)

STATE ENGINEER'S ENDORSEMENTS.

Dates

.....Application received at State Engineer's office.
.....Application examined and..... .....
.....Application returned for correction by.....
.....Corrected application received by.....

.....Corrected application examined and.....
Reason for returning application.....
.....
Reason for rejecting application.....
.....

This application is approved on condition and it is hereby required that actual construction work shall begin within six months and be fully completed within .....from the date of approval hereof.

.....
State Engineer.

STATE ENGINEER'S MEMORANDA.

DATES

.....Fee for filing application paid $.....
.....Fee for recording and approving application paid $.....
.....Proof of appropriation made.....
.....Fee for filing proof of appropriation paid $.....
.....Proof of appropriation examined and.....
.....Proof of appropriation returned for correction by.....
.....Corrected proof of appropriation received by .....
.....Corrected proof of appropriation examined and.....
.....Time for completing works extended to.....
.....Fee for issuing certificate of appropriation paid $.....
.....Certificate of appropriation issued (No....).
.....Cost of publishing notice deposited $.....
.....Publication began and was completed.....
.....Notice published in.....
.....Application protested by.....
.....

I hereby certify that the foregoing is a true copy of the application made by.....to appropriate water and of the endorsements therein as shown by the records of my office.

....

State Engineer.

RULES AND REGULATIONS.

All applications must be dated at place where made and signed by applicant.

Erasures must not be made on applications returned for correction.

All corrections must be made in red ink and be plainly written.

Corrected applications should be returned for filing within sixty days after the date of return endorsed thereon. If the application is returned after the expiration of the sixty days it will treated as a new application.

No application or proof of appropriation will be filed before required fees have been paid.

Applicants will be informed by this office when the cost of publishing notice of application is due.

Applicants must advance cost for publication within ten days after having been so informed.

Request for extension of time to complete work will not be considered unless accompanied by sufficient affidavit and required fee.

Fees Required by Law for State Treasury.

For examining and filing application.....$2.50

For examining and filing map, profile and drawings that are part of the proof of appropriation..... .... 5.00

For approving and recording completed application..... .... 2.50

For issuing certificate of appropriation..... 1.00

For filing affidavit or any other paper..... 1.00

Applicants will save time and expense by familiarizing themselves with the law before making applications.

(Endorsed:—)

No.....

Application of.....to Appropriate Water from .....for Power Purposes. Recorded in Book..... of Applications to Appropriate Water, on pages..... to.....

Application to Appropriate Water For Mining.

State of Utah.

....190....

For the purpose of acquiring the right to use a portion of the unappropriated water of the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of Chapter 108 of the Session Laws of Utah, 1905.

The Purpose for Which the Water is to be Appropriated is Mining.

NOTE.—If it is intended to use the water for some purpose other than Irrigation, Power or Mining fill as many of the first fifteen blanks as are applicable, and then state the purpose for which it is to be used under the heading "Miscellaneous Purposes."

1. The name of the applicant is..... .....
2. The postoffice address of the applicant is.....
3. The flow of water to be used in cubic feet per second is..... ....

3a. The quantity of water to be appropriated is (See note under explanatory).....acre-feet.

4. The water is to be used each year from.....
MONTH DAY.

to.....
MONTH DAY.

5. The water is diverted from.....
Name river system or drainage area.

in.....County.

6. The particular point at which the water is to be diverted is described as follows:

(NOTE.—If on a fork, branch, tributary or a feeder of said stream or source or an isolated spring in its drainage area, name same, and give course and distance of "point of diversion" or "point of issuance" of spring to some U. S. land corner if within six miles of one, if not, to some prominent and permanent natural object.)

.....

7. The diverting works will consist of.....

8. The cross section of the diverting channel will be ⊔ ⌣ or O
(Strike out ones not needed.)

9. The nature of the diverting channel will be: earthen, wooden, iron or concrete.
(Strike out ones not needed.)

10. The length of the diverting channel will be..... feet.

11. The top width of the diverting channel will be (if a flume or ditch).....feet.

12. The bottom width of the diverting channel will be (if a flume or ditch).....feet.

13. The depth of water in the diverting channel will be (if a flume or ditch).....feet.

14. The diameter of the diverting channel will be (if a pipe).....feet.

15. The grade of the diverting channel will be..... feet per mile.

16. The water will be used in.....mining district, at the.....mine, where the following ores or materials are mined:..... ....

17. The particular purpose for which the water is to used is..... .... This use will consume.....second-feet of the water and.....second-feet of it will be returned to the natural stream or source at a point (see note under No. 5)..... ....

Miscellaneous Purposes.

....

Explanatory.

(From here on this form is identical with the form just preceding.)

(Endorsed:—)

No.....

Application of.....to Appropriate Water from .....for Mining Purposes. Recorded in Book..... of Applications to Appropriate Water, on pages..... to.....

Application to Appropriate Water for Irrigation.

State of Utah.

....190....

For the purpose of acquiring the right to use a portion of the unappropriated water of the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of Chapter 108 of the Session Laws of Utah, 1905.

The Purpose for Which the Water is to be Appropriated is Irrigation.

If it is intended to use the water for some purpose other than Irrigation, Power or Mining fill as many of the first fifteen blanks as are applicable and then state the purpose for which it is to be used under the heading "Miscellaneous Purposes."

1. The name of the applicant is.....

2. The postoffice address of the applicant is.....

3. The flow of water to be used in cubic feet per second is.....

3a. The quantity of water to be appropriated is (See note under explanatory).....acre-feet.

4. The water is to be used each year from.....
MONTH DAY.

to.....
MONTH DAY.

5. The water is diverted from.....
Name river system or drainage area.

in.....County...

6. The particular point at which the water is to be diverted is described as follows:

(NOTE.—If on a fork, branch, tributary or a feeder of said stream or source or an isolated spring in its drainage area, name same, and give course and distance of "point of diversion" or "point of issuance" of spring to some U. S. land corner if within six miles of one, if not, to some prominent and permanent natural object.)

.....

7. The diverting works will consist of.....

8. The cross section of the diverting channel will be ⊔ __/ or O
(Strike out ones not needed.)

9. The nature of the diverting channel will be: earthen, wooden, iron or concrete.
(Strike out ones not needed.)

10. The length of the diverting channel will be..... feet.

11. The top width of the diverting channel will be (if a flume or ditch).....feet.

12. The bottom width of the diverting channel will be (if a flume or ditch).....feet.

13. The depth of water in the channel will be (if a flume or ditch).....feet.

14. The diameter of the diverting channel will be (if a pipe).....feet.

15. The grade of the diverting channel will be..... feet per mile.

16. The legal subdivisions of the land to be irrigated are as follows:

....

Total area.....acres.

17. The character of the soil in the above tract of land is.....and the sub-soil is.....

Miscellaneous Purposes.

....

Explanatory.

(From here on this form is identical with the forms just preceding.)

(Endorsed:—)

No.....

Application of.....to Appropriate Water from .....for Irrigation Purposes. Recorded in Book .....of Applications to Appropriate Water, on pages .....to.....

Proof of Appropriation of Water.

State of Utah,
County of..... } ss.

I,.....being first duly sworn do say that I have completed the work required to accomplish the diversion and perfect the appropriation of water from.....for.....purposes in accordance with the application made by.....and filed in the State Engineer's office as No.....; that the following statement of facts is submitted in proof of the completion of said work and the appropriation of said water; that I have read the said statement and that each and all of the items contained therein are true.

In Witness Whereof I have hereunto set my hands this.....day of.....190....

.....

Subscribed and sworn to before me this.....day of.....190....

.....

.....

Statement.

1. Name of channel.....
2. Name of owner of channel.....
3. Postoffice address of owner.....
4. Flow of water used, in cubic feet per second.....
5. Water use each year from.....to.....inclusive.
6. Water diverted from.....
7. Point of diversion situated.....
8. Diverting works consist of.....
9. Shape and nature of channel.....
10. Length of channel in feet.....

11. Mean width of channel in feet (if ditch or flume) .....
12. Effective depth of channel in feet (if ditch or flume) .....
13. Diameter of channel in feet or tenths of a foot (if a pipe) .....
14. Grade of channel per mile, in feet.....
15. Construction of channel commenced.....
16. Construction of channel completed.....
17. Channel first used to carry water.....
18. Water used for.....
19. Water diverted from.....hand bank looking down stream.....

When the Water is Used for Irrigation.

20. Total area of land irrigated, in acres.....
21. Character of soil.....
22. Character of sub-soil.....
23. Character of crops raised.....
24. Description of land irrigated.....

When the Water is used for Developing Power.

20. Total horse-power developed.....
21. Place where power is developed.....
22. Places where power is used.....
23. Purposes for which power is used.....

	No. of Wheels Used	Size of Wheel	Kind of Wheels	Head of water on Whl's
24.	.....	.....	.....	.....
	.....	.....	.....	.....
	.....	.....	.....	.....
	.....	.....	.....	.....
	.....	.....	.....	.....

25. Place where water is returned to natural stream .....

When the Water is Used for Mining.

20. Name of the mine where the water is used.....
21. Name of the mining district in which the mine is located.....
22. Kind of material mined.....
23. Particular purpose for which water is used.....
24. Quantity of water in cubic feet per second, that is consumed.....
25. Quantity of water in cubic feet per second that is returned to natural stream.....
26. Place where unconsumed water is returned to natural stream.....

When the Water is Used for Purposes Other than Irrigation, Power and Mining.

20. Purpose for which water is used.....
21. Place where water is used.....
22. Quantity of water consumed, in cubic feet per second.....
23. Quantity of water returned to natural stream in cubic feet per second.....
24. Place where unconsumed water is returned to natural stream.....

General Remarks.

.....
.....
.....

State of Utah, } ss.
County of .... }

.....and.....having both been duly sworn each for himself says that he is personally acquainted with the works constructed by..... for the diversion of water from.....for..... purposes; that said works have been fully completed and

used to the extent and in the manner particularly set forth in the foregoing statement of facts; that he has read said statement and that each and all of the items contained therein are true.

In Witness Whereof each has hereunto set his hand this.....day of.....190....

.....

.....

Subscribed and sworn to before me this.....day of.....190....

[Seal] .....

.....

Certificate of Appropriation of Water.

State of Utah.

Certificate No.....B Priority No.....B

.....Water Division

WHEREAS, It has been made to appear to the satisfaction of the undersigned, State Engineer of the State of Utah, that the appropriation of water from the ..... Water Division, made by.....has been perfected in accordance with the application therefor, dated..... 190..., and recorded in the office of the State Engineer on page.....in Book.....of the record of applications to appropriate water; WHEREFORE, Be it known that I,....., State Engineer of the State of Utah, under and by authority and direction of the provisions of Chapter 100 of the Laws of Utah of 1903, on "Water Rights and Irrigation," do hereby certify that the said .....of.....in.....County, State of Utah, is entitled to the use of.....cubic feet

of water per second, subject to the following restrictions, to wit:

....

The date of the appropriation is.....190..., and the priority number of the right is No.....B.

In Witness Whereof, I have hereunto set my hand and affixed the seal of my office this.....day of .....A. D. 190....

....

State Engineer.

(Endorsed:—)

Certificate of Appropriation of Water.

State of Utah.

....Water Division

Certificate No.....B Priority No.....B

To..... ....

For..... ....

Filed for record this.....day of....., 190..., at....o'clock...M., and recorded in Book.....of Water .....Page.....

....

Recorder.....County, Utah.

This Certificate must be filed for record with Recorder of.....County, Utah, within thirty days from its date.

NOTE.—Rules and regulations of the State Engineer's office are printed in pamphlet form and must be followed by the appropriator.

WYOMING.

The State Engineer's Office Must be Notified Immediately When You Complete Your Ditch.

Application for a Permit to Divert and Appropriate the Water of the State of Wyoming.

Water Division No..... District No.....

I,.....of....., County of ....., State of....., being duly sworn according to law, upon my oath say:

1. The name....of the applicant.....

2. The postoffice address....of the applicant.....

3. The use to which the water is to be applied is....

4. The name of the ditch or canal is.....

5. The source of the proposed appropriation is.....

6. The headgate of the proposed ditch or canal is located.....of Section....., Township ....., Range.....

7. The said ditch or canal is to be.....miles long and to pass through the following lands (give route by courses and distances, or by naming legal subdivisions crossed):

.....

8. The dimensions of said works: (a) [At headgate] Width on top (at water-line).....feet; width on bottom .....feet; depth of water.....feet; grade.....feet per mile.

(b) Give dimensions at each point where reduced in size, stating miles from headgate:

[At.....] Width on top (at water-line).....feet; width on bottom.....feet; depth of water.....feet; grade.....feet per mile.

[At.....] Width on top (at water-line).....feet; width on bottom.....feet; depth of water.....feet; grade.....feet per mile.

[At.....] Width on top (at water-line).....feet; width on bottom.....feet; depth of water.....feet; grade.....feet per mile.

9. Describe the character of proposed works, stating:

1st. The nature of the material to be moved. 2nd. Number and length of tunnels, if any. 3rd. Amount of fluming, if any.

....

10. The estimated cost of said ditch is.....Dollars.

11. The land to be irrigated has a total area of..... acres, described as follows: (Give estimated acreage in fractions of subdivisions)..... ....

12. Construction will begin on proposed works on or before....., 190....

13. The time required for the completion of ditches and other distributing works is.....year from....., 190....

14. The time required to complete the application of water to the beneficial use stated in this application is .....year from....., 190....

15. A map of the proposed ditch or canal, prepared in accordance with Chapter 14, R. S. 1899, accompanies this application.

Signed:

....

NOTE.—The statements in the foregoing application must comply with the requirements of Chapter 14, R. S. 1899.

The State of Wyoming, } ss.
County of.....}

I hereby certify that the foregoing application was signed in my presence and sworn to before me by..... this.....day of....., 190....

....
....
....

The State of Wyoming, } ss.
State Engineer's Office. }

This is to certify that I have examined the foregoing application and have returned the same without my approval for the following reasons:.....

Witness my hand this.....day of....., A. D. 190....

....
State Engineer.

The State of Wyoming, } ss.
State Engineer's Office. }

This is to certify that I have examined the foregoing application and do hereby grant the same subject to the following limitations and conditions:..... .....

Construction of proposed work shall begin within one year from date of approval.

The time for completing the work shall terminate on December 31, 190....

The time for completing the appropriation of water for beneficial use shall terminate on December 31, 190..

The amount of the appropriation shall be limited to one cubic foot per second of time for each seventy acres of land reclaimed on or before December 31, 190..., and the additional volume used for.....purposes on or before said date.

Witness my hand this.....day of....., A. D. 190....

....
State Engineer.

(Endorsed:—)
No.....
Application for a Permit to Appropriate the Water of the State of Wyoming.
Division No..... District No.....

The State of Wyoming, } ss.
State Engineer's Office. }

This instrument was received and filed for record on the.....day of....., A. D. 190..., at..... o'clock...M., and duly recorded in Book....of....., on page..... ....

....
State Engineer.

The State Engineer's Office Must be Notified Immediately When You Complete Your Ditch.

Application for a Permit to Enlarge an Appropriation.

Water Division No..... District No.....
Enlargement of the..... ....

I,.....of....., County of ....., State of....., being duly sworn according to law, upon my oath say:

1. The location and description of the ditch to be enlarged is as follows:

2. The headgate is situated.....of Section....., Township ....., Range.....

3. Said ditch is.....miles long and passes through the following lands (give legal subdivisions), the same

being correctly shown on the map accompanying this application:

....

....

4. The dimensions of said ditch are: Width on top (at water-line).....feet; width on bottom.....feet; depth of water.....feet; grade..... feet per mile.

5. Said ditch now serves to irrigate the following described land:

....

6. The total area now irrigated from said ditch being.....acres.

7. Application is hereby made for permission to enlarge or extend the use of water through the above named and described ditch and to divert and appropriate the water of the State as follows:

1. The name....of the applicant..... .....

2. The postoffice address....of the applicant.....

3. The use to which the water is to be applied is....

4. The name of the ditch or canal is.....

*5. The source of the proposed appropriation is..... .....and the head of the proposed extension is located.....Section....., Township ....., Range .....

6. The said ditch or canal as enlarged is to be..... miles long and to pass through the following lands (give sections, townships and ranges) :..... .....

7. The dimensions of said ditch are to be: (a) [At headgate] Width on top (at water-line).....feet; width on bottom.....feet; depth of water.....feet; grade.....feet per mile.

*If the proposed work is to be an extension of the original ditch, give the location of the head of the extension by courses and distances from the nearest Government corner.

(b) Give dimensions at each point where reduced in size, stating miles from headgate:

[At.....] Width on top (at water-line).....feet; width on bottom.....feet; depth of water.....feet; grade.....feet per mile.

[At.....] Width on top (at water-line).....feet; width on bottom.....feet; depth of water.....feet; grade.....feet per mile.

8. Describe the character of proposed works, stating: 1st. The nature of material to be moved. 2d. Number and length of tunnels, if any. 3rd. Amount of fluming, if any.

....

9. The estimated cost of said enlargement is..... Dollars.

10. The land to be irrigated has a total area of..... acres, described as follows: (Give estimated acreage in fractions of subdivisions)..... .....

11. Construction of the proposed enlargement or extension will begin within one year from date of approval of this application.

12. The time required for the completion of enlargement or extension is.....year from....., 190....

13. The time required to complete the application of water to the beneficial use stated in this application is .....year from....., 190....

14. A map in duplicate, prepared in accordance with the provisions of Section 35 of the Water Laws, accompanies this application.

Signed:

....

NOTE.—The statements in the foregoing application must comply with the requirements of Chapter 14, R. S. 1899.

NOTE.—Before applications for the enlargement of ditches can be approved, the written consent of the owners of such ditches must be secured, and this must accompany the application.

The State of Wyoming, } ss.
County of..... }

I hereby certify that the foregoing application was signed in my presence and sworn to before me by..... this.....day of....., 190....

....
....
....

The State of Wyoming, } ss.
State Engineer's Office. }

This is to certify that I have examined the foregoing application and have returned the same without my approval for the following reasons:.....

Witness my hand this.....day of....., A. D. 190....

....
State Engineer.

The State of Wyoming, } ss.
State Engineer's Office. }

This is to certify that I have examined the foregoing application and do hereby grant the same subject to the following limitations and conditions:..... .....

Work will begin one year from date of approval.

The time for completing construction shall terminate ....., 190....

The time for completing the appropriation of water for beneficial use shall terminate....., 190....

The amount of the appropriation shall be limited to one cubic foot per second of time for each seventy acres of land reclaimed on or before....., 190..., and

the additional volume applied to.....purposes on or before that date.

Witness my hand this.....day of....., A. D. 190....

....
State Engineer.

(Endorsed:—)
No.....

Application for a Permit to Appropriate the Water of the State of Wyoming.

Division No..... District No.....

The State of Wyoming, } ss.
State Engineer's Office. }

This instrument was received and filed for record on the.....day of....., A. D. 190..., at..... o'clock...M., and duly recorded in Book....of....., on page.....

....
State Engineer.

The State Engineer's Office Must be Notified Immediately upon the Completion of these Works.

Application for a Permit to Construct the.....Reservoir, and to Divert and Appropriate the Water of the State of Wyoming.

Water Division No..... District No.....

I,.....of....., County of ....., State of....., being duly sworn according to law, upon my oath say:

1. The name....of the applicant..... .....
2. The postoffice address....of the applicant.....
3. The name of stream from which reservoir is to be filled and appropriation made is.....

4. The location of the proposed reservoir will be in Sec....., T..... N., R..... W., described as follows:

(a) State whether situated in channel of running stream, and give character of material at outlet.....

(b) If not in channel of running stream, state how it is to filled. If through canal, give name and dimensions.....

(c) The construction of dam, the material of which it is to be built and the method of protecting from waves are as follows:.....

5. The area of reservoir is.....acres, with maximum depth of.....feet and approximate mean depth of water of.....feet.

6. The dimensions of dam are: Length on top..... feet. Length on bottom.....feet. Width on top..... feet. Width on bottom.....feet. Depth.....feet. Slope of front..... Slope of back..... Height of dam above water-line when full.....feet.

7. The outlet and wasteway, with dimensions of each, are as follows:

.....

8. The use to which the water is to be applied is.....

9. The name of the ditch or canal is.....

(If ditch is already constructed, give No. of Permit or date of construction.)

10. The headgate of the proposed ditch or canal is located.....of Section....., Township.....,North, Range.....West.

11. Said ditch or canal is to be.....miles long and to pass through the following lands (give route by courses and distances, or by naming legal subdivisions crossed):

.....

12.. The dimensions of said ditch are to be: (a) [At headgate] Width on top (at water-line).....feet; width on bottom.....feet; depth of water.....feet; grade.....feet per mile.

(b) Give dimensions at each point where reduced in size, stating miles from headgate:

[At.....] Width on top (at water-line).....feet; width on bottom.....feet; depth of water.....feet; grade.....feet per mile.

[At.....] Width on top (at water-line).....feet; width on bottom.....feet; depth of water.....feet; grade.....feet per mile.

13. Describe the character of proposed ditch, stating: 1st. The nature of material to be moved. 2nd. Number and length of tunnels, if any. 3rd. Amount of fluming, if any.

....

....

14. The estimated cost of said ditch is $.....and of the reservoir is $.....

15. The land to be irrigated has a total area of..... acres, described as follows: (Give estimated acreage in fractions of subdivisions)..... .....

16. Construction will begin on proposed works on or before....., 190...

17. The time required for the completion of ditches and other distributing works is.....year from ....., 190....

18. The time required to complete the application of water to the beneficial use stated in this application is..... .....year.....from....., 190.....

Signed:

....

NOTE.—The statements in the foregoing application, together with the maps and plans, must comply with the requirements of Chapter 14, R. S. 1899.

The State of Wyoming, } ss.
County of..... }

I hereby certify that the foregoing application was signed in my presence and sworn to before me by..... this.....day of....., 190....

....

....

....

The State of Wyoming, } ss.
State Engineer's Office. }

This is to certify that I have examined the foregoing application and have returned the same without my approval for the following reasons:.....

Witness my hand this.....day of....., A. D. 190....

....

State Engineer.

The State of Wyoming, } ss.
State Engineer's Office. }

This is to certify that I have examined the foregoing application and do hereby grant the same subject to the following limitations and conditions:..... .....

Construction of proposed work shall begin within one year from date of approval.

The time for completing the work shall terminate on December 31, 190....

The time for completing the appropriation of water for beneficial use shall terminate on December 31, 190..

The amount of the appropriation shall be limited to one cubic foot per second of time for each seventy acres

of land reclaimed on or before December 31, 190..., and the additional volume used for.....purposes on or before said date.

Witness my hand this.....day of....., A. D. 190....

....
State Engineer.

(Endorsed:—)
No.....

Application for a Permit to Construct the..... Reservoir and to Appropriate the Water of the State of Wyoming.

Division No..... District No.....

The State of Wyoming, } ss.
State Engineer's Office. }

This instrument was received and filed for record on the.....day of ....., A. D. 190..., at .....o'clock....M., and duly recorded in Book..... of Reservoirs and Water Appropriations, on Page.....

....
State Engineer.

The State Engineer's Office Must be Notified Immediately upon the Completion of these Works.

Application for a Permit to Construct the.....Reservoir, and to Store the Unappropriated Water of the State of Wyoming.

Water Division No..... District No.....

I,.....of....., County of ....., State of....., being duly sworn according to law, upon my oath say:

1. The name....of the applicant..... .....

2. The postoffice address....of the applicant.....

3. The name of stream from which reservoir is to be filled and appropriation made is.....

4. The use to which the water is to be applied is....

5. The location of the proposed reservoir will be in Sec....., T..... N., R..... W., described as follows:

(a) State whether situated in channel of running stream, and give character of material at outlet.....

(b) If not in channel of running stream, state how it is to filled. If through canal, give name and dimensions..... ....

(c) The construction of dam, the material of which it is to be built and the method of protecting from waves are as follows:..... .....

6. The area of reservoir is.....acres with maximum depth of.....feet and approximate mean depth of water of.....feet.

7. The dimensions of dam are: Length on top..... feet. Length on bottom.....feet. Width on top..... feet. Width on bottom.....feet. Depth.....feet. Slope of front..... Slope of back..... Height of dam above water-line when full.....feet.

8. The outlet and wasteway, with dimensions of each, are as follows:

....

9. The outlet of the proposed reservoir is located ....of Section....., Township..... North, Range.....West.

10. The estimated cost of said reservoir is $.....

11. Construction will begin on proposed works on or before....., 190....

12. The time required for the completion of the works is.....year from....., 190...

Signed:

.....

The State of Wyoming, } ss.
County of..... }

I hereby certify that the foregoing application was signed in my presence and sworn to before me by..... this.....day of....., 190....

.....

.....

....

NOTE.—The statements in the foregoing application, together with the maps and plans, must comply with the requirements of Chapter 69, Session Laws 1903.

The State of Wyoming, } ss.
State Engineer's Office. }

This is to certify that I have examined the foregoing application and have returned the same without my approval for the following reasons:.....

Witness my hand this.....day of....., A. D. 190....

.....

State Engineer.

The State of Wyoming, } ss.
State Engineer's Office. }

This is to certify that I have examined the foregoing application and do hereby grant the same subject to the following limitations and conditions:..... .....

Construction of proposed works shall begin within one year from date of approval.

The time for completing the work shall terminate on December 31, 190....

Witness my hand this.....day of....., A. D. 190....

.....
State Engineer.

(Endorsed:—)

No.....

Application for a Permit to Construct the..... Reservoir and to Store for a Beneficial Use the Unappropriated Water of the State of Wyoming.

Water Division No..... District No.....

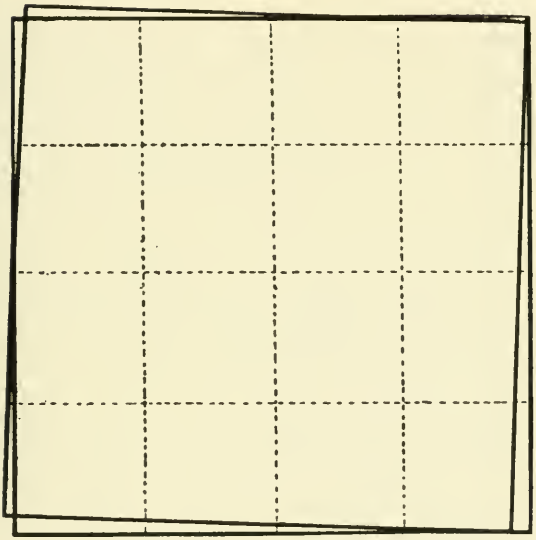
The State of Wyoming, } ss.
State Engineer's Office. }

This instrument was received and filed for record on the.....day of....., A. D. 190..., at..... o'clock....M., and duly recorded in Book 3 of Reservoirs on Page.....

....
State Engineer.

Section....., Township.....north,

Range.....east.

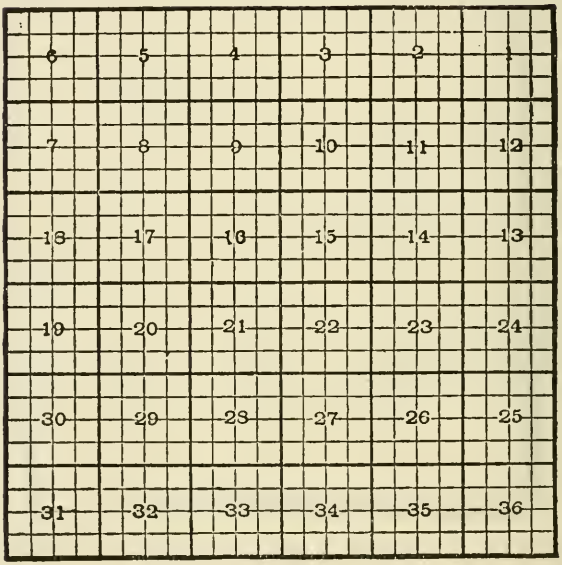


The above plat correctly shows my irrigated and irrigable lands under .....

Plat accompanying application for permit to appropriate water in Nevada. (See page 461, *supra*.) This cut is reduced from the original.)

Township.....Range.....

of 6th P. M.....County.....



Township plat accompanying application for waters in Nebraska. (See page 454, *supra*.) This cut is reduced from the size of the original.

INDEX.

[References are to Pages.]

ABANDONMENT. See Forfeiture.
general principles of, c. XII.
definition of, 268.
evidence rebutting, 268.
no presumption of, 269.
accession and, 272.
distinguished from forfeiture, 273.
effect of, 186.
effect of payment of taxes on, 274.
for failure of usefulness, 166, 189, 210.
conditional, 188.
decay of ditches is evidence of, 263.
typical case of, 263.
no revival of right by sale after, 263.
recapture of abandoned water. See Recapture.
intent to recapture prevents, 264.
when stream ceases to flow, 267.
implied, 186.
of ditch not necessarily of water right, 189, 194, 263, 275.
of ditch gives no right to build another elsewhere, 200.
is voluntary and a question of fact, 263, 268.
concurrence of act and intent necessary, 263.
no abandonment of riparian rights, 302. See Riparian Rights.
parol sale. See Parol Sale.
sometimes held not, 187, 188.
as abandonment, 186, 187, 265.
faulty deed as abandonment, 265.
non-user. See Non-user.
unreasonable time of, 266.
not necessarily abandonment, 268.
a question of fact for jury, 268.
for five years. See Forfeiture.
of waste, 264, 270, 271. See Waste.
from artificial watercourse, 270, 271.
drainage ditch, 270.
ceasing abandonment of, 271.
use of by others, 160.

[References are to Pages.]

ABSOLUTE RIGHT.
in percolating water, old rule, 134.
of property, 82.
to water in artificial watercourse, 120.
to water pumped from mine, 198.

ACCELERATION. See Riparian Rights.

ACCESSION.
water becoming part of stream by, 272.

ACCOUNTING.
by trespasser to true owner, 161.

ACEQUIAS. See Mexican Law.
Arizona law of, sec. 20.

ACQUIESCENCE.
of United States in doctrine of appropriation, 24, 50, 51, 91.
See Appropriation, Nature of; Customs of Miners; United States; California Doctrine; Public Lands; Federal Statutes, etc.

ACT. See Statutes.

ACT OF CONGRESS. See Federal Statutes.
of 1866 and 1870, Rev. Stats. 2339, 2340, the basis of the law of appropriation. See Federal Statutes.
constitute an express grant, 53.
appropriations are deraigned under, 51.
references to, 309.

ACT OF GOD.
and percolating water, 231.

ACTION. See Equity; Parties; Suit, etc.
joinder of parties in, 247.
joinder of causes of, 247.
cross-complaint in, by riparian owner, 249.
strangers to, rights of cannot be set up, 240.
to quiet title, 169.
to determine priorities. See Adjudication.
at law, secs. 168, 186.
for abatement of nuisance, 245.
right of, effect of doctrine of relation, 164.
at law to protect water rights, sec. 186.
for diversion of percolating water, 134.

ACTUAL APPLICATION TO USE. See Abandonment; Method of Appropriation; Purpose of Appropriation, etc.
necessity for, 166, 277.
failure to make is abandonment, 165, 166, 210, 267, 274.
is matter in defeasance, 165.

[References are to Pages.]

ACTUAL APPLICATION TO USE (Continued).
time for
must be within reasonable time, 165, 166.
diligence required of irrigator, 210, 211, 212.
five years a limit, 211.
under irrigation codes, 213.
of water held for future needs. See Future Needs; Irrigation, etc.
actual use limits quantity allowed appropriator, 170, sec. 141.
how quantity actually used is calculated, 205.
at completion of work, must be apparent ability of, 165.
bona fides of, 166.
not an element of completion of work, 166.
not a prerequisite to invoking doctrine of relation, 165, 166.
under irrigation codes. See License; Method of Appropriating, etc.
notice of, sometimes required, 174.
form of notice of, 435, 437.
form of proof of, 438, 440.
examination of by State Engineer, 174.
time for specified in some States, 213.
formalities of, 273.

ACTUAL DIVERSION. See Actual Application; Completion; Method of Appropriation, etc.
title ripens into right only on, 163.
whether necessary to completion of work, 160.
to distant lands, 160.
appropriation by. See Method of Appropriation.
failure to comply with statute may result in. See Forfeiture.
failure to comply with statute not necessarily fatal, 151.
mere diversion may give rise to, 141, 161.
does not secure benefit of doctrine of relation, 140.
where lack of diligence, 159.
Civil Code of California does not apply, 140.
statute of Montana does not apply, 142.
requisites of, 141.
priority in cases of, 161.
date of right on, 161.
determination of amount allowed on, 204.
examples of
entry on death of owner, 143.
may result from parol sale, 143, 186, 266.
use of works belonging to another, 160, 161.

[References are to Pages.]

ACTUAL DIVERSION (Continued).
mere settlement on banks of stream is not *per se*, 143.
location of placer claim is not *per se*, 143.
taking up millsite is not *per se*, 143.
law of, 188, 273, 279.
ACRE-FOOT.
unit of volume of water, 175.
ADJUSTMENT OF EXISTING PRIORITIES UNDER IRRIGATION CODES. See, also, Administration; Quieting Title, etc.
general principles of, c. XI.
two methods in different States, 257.
purely statutory, 257.
statutory method is conclusive, 261.
collateral attack on, 261.
by board or State Engineer
survey, maps, evidence, etc., 257, 258.
notice of, 257.
certificate of priority issued, 258.
recording certificate, 258.
form of certificate, 466.
by decree of court under special proceedings:
survey, maps, evidence, etc., 258, 259, 260.
notice of hearing, 258, 259.
pleadings, 260.
in whose name suit is brought, 259.
jurisdiction of court, 258.
decree, 259.
certificate of priority, 260.
filing and recording of, 260.
ADMISSION.
into Union, of Wyoming, 63.
ADMITTANCE.
surrender and, 265.
ADMINISTRATION UNDER IRRIGATION CODES. See Adjudication of Priorities; Irrigation Codes, etc.
supervision of appropriators under, c. X.
declarations concerning control of State, 251.
use of water a public use, 251.
significant features of, 251.
centralization of, 251.
supervision of State.
boards of irrigation, 252.
board of control, 252.
rules and regulations for, 252.
State Engineer, 253.

[References are to Pages.]

ADMINISTRATION UNDER IRRIGATION CODES (Continued).
intermediate subdivisions of State
water or irrigation divisions, 253.
division superintendents, 253.
general rules and regulations for water divisions, 253.
primary subdivisions.
water districts, 254.
irrigation districts, 254.
water commissioners, 254.
rules and regulations for supervision of water districts, 254.
police regulations,
keeping headgates, measuring devices, etc., 255.
crimes, 255.
obstructing work of officials is criminal, 255.
statutes concerning, in
Colorado, 336.
Idaho, 339.
Nebraska, 354.
New Mexico, 361.
Oklahoma, 367.
South Dakota, 373.
North Dakota, 363.
Utah, 378.
Wyoming, 407.
ADVERSE USE.
under void deed, 280.
upper and lower claimants affected by, 280.
use of surplus is not, 280.
use below is not, 280.
no adverse use by force or fraud, 280.
amount of damage immaterial, 281.
of percolating water, 281.
priority on right acquired by, 278.
and appropriation by actual diversion, 278.
requisites for acquisition of right by, 279.
posting of notice not necessary, 279.
beneficial use necessary, 279.
length of time for, 279.
must be continuous, 279.
must be hostile, 279.
permission as affecting, 280.
must be open, 281.
must be chance to present, 281.
must be uninterrupted, 282.
verbal objection does not interrupt, 282.

[References are to Pages.]

ADVERSE USE (Continued).
payment of taxes and, 282.
against United States, 282.
distinguished from appropriation, 283.
summary of law of, 283.
whether must be peaceable, 283.
difficulty of obtaining rights by, 284.
against upper riparian owner, 303.
use of surplus is not, against riparian owner, 303.
of ditch, 197.
of water, 197, 278.
corporation may acquire right by, 278.
against tenant as affecting landlord, 278.
presumed grant on, 278.
title and, 161, 278.
pleading, 278, 283.
AFFIDAVIT.
Colorado form of, 231.
AGRICULTURE. See Debris; Irrigation; Pollution, etc.
protection of, against pollution by miners, 230, 236.
and mining, under new rule of percolating water, 231.
appropriation for, 188. See Purpose of Appropriation.
early attempt to discriminate against, 31.
patents for, in mining regions, 77, note.
ALIENS.
appropriation by, 91.
ALLEGATIONS IN COMPLAINT. See Parties; Pleadings, etc.
of damages, in actions at law, 83, 245, 248.
is immaterial allegation, 248.
proof of diversion of less than alleged no bar to recovery, 248.
that appropriator is owner, 248.
place of use, need not be alleged, 248.
of appropriation not support judgment as riparian proprietor, 248.
AMOUNT OF WATER. See Quantity.
ANIMAL.
seepage caused by burrowing of, 203.
ANTIQUITY.
of irrigation, 58.
APPLIANCES.
used in diverting water immaterial, 184.
injurious to fish, 250.
APPLICATION FOR PERMIT UNDER IRRIGATION CODES. See Method of Appropriating Under Irrigation Codes.
necessity for, sec. 112.

[References are to Pages.]

APPLICATION FOR PERMIT UNDER IRRIGATION CODES (Continued).
must be made before beginning work, 170.
in Colorado, within sixty days after beginning, 170.
contents of, 170.
with whom filed, 170.
returning to be corrected, 171.
fixes maximum allowed appropriator, 204.
date of, fixes priority, 174.
indorsement of approval by State Engineer, 171.
forms used in
Idaho, to appropriate, 425.
to transfer, 443.
Nebraska, to appropriate, 449.
form of plat accompanying, 454, 516.
Nevada, to appropriate, 460.
notice of application for publication, 462.
North Dakota, to appropriate, 468.
to enlarge, 474.
Utah, to appropriate for power, 485.
to appropriate for mining, 490.
to appropriate for irrigation, 492.
Wyoming, to appropriate, 500.
to enlarge an appropriation, 503.
to build reservoir, 507, 511.
etc. See Forms.
APPLICATION OF WATER TO BENEFICIAL USE. See Actual Application; Purpose of Appropriation, etc.
by riparian owner. See Riparian Rights.
APPORTIONING WATER. See Adjustment of Priorities; Quieting Title, etc.
for days or hours, among appropriators, 208, 246.
must be impartial, 247.
percolating water, 299.
by time, among riparian owners, 298.
in times of scarcity, 247. See Quantity of Water.
under irrigation codes. See Preferences and Pro-rating; Adjustment of Priorities, etc.
for weeks, days, etc., riparian right, 298, 299.
APPROPRIATION. See Appropriation; Common Law; Riparian Rights, etc.
not apply to water in artificial watercourse, 196.
allegation of, not support judgment as riparian owner, 248.
appropriation use, and non-use are the tests of right, 220.
aims of doctrine of, 209.

[References are to Pages.]

APPROPRIATION (Continued).
supreme court of United States, views upon, 21.
for distant lands. See Place of Use.
what can be appropriated. See Streams; Lakes; Underground Water, etc.
universally in force in West, 48.
aridity as test of value of doctrine, 30.
arid States, attitude of. See Colorado Doctrine.
not needed for right by adverse use, sec. 195.
necessity for doctrine of, 56 et seq.
State boundaries no barriers to, 117.
cannot be initiated by trespass, 103, 106.
distinguished from
prescription, 108, 140.
adverse use, 198, 283.
riparian rights, 207, 223, 227, 234, 237, 248, 289, 303, 304.
not the doctrine of the common law, 290.
and common law. See Common Law.
history of the doctrine:
arose in California, c. I.
early conditions in California, 1 et seq.
arose out of pioneer conditions in California, 31 et seq.
original precedent, 7.
Irwin v. Phillips, 7, 11.
silence and tacit assent of United States and State, 9, 97.
at first rejected by California court, 6.
early California policy, 10.
difficulties of California court, 6,
early California statutes indirectly influencing, 9.
was judicial legislation, 13, 16.
early argument that not applicable to irrigation, 31.
contest between appropriation and common law at start, 11.
attempt to blend the two into one, 12.
nature of appropriation
is a possessory right, 22, 153.
is equivalent to taking possession of water, 139.
a pioneer doctrine, 30.
Federal Statutes of 1866 and 1870 the basis of. See Federal Statutes.
local customs the basis of. See Customs of Miners.
originally rested on presumption, 13, 15.
does not sanction monopoly, 145.
cannot be constructive, 140.

[References are to Pages.]

APPROPRIATION (Continued).
characteristics of, 82 et seq., 208.
equality to all pursuits. See Purpose of Appropriation.
appropriation usufructuary, sec. 38.
independent of ownership or possession of land, sec. 42.
use on distant lands, 85.
ownership of land as evidence against *bona fide* intent, 86.
transfer to other lands under irrigation codes, 86.
dependence on land under irrigation codes, 86.
does not sanction monopoly, 145.
is a grant from the government, 51, 72, 81, 91, 111, 294.
a license, 53, 108.
resting on Act of Congress, 51, 52.
a privilege, 88.
an express grant, 108.
tests of, 91.
statement of the doctrine, 46.
definition of, sec. 47.
combined with riparian rights in same owner, 101.
and constitutional law. See Constitutional Law.
compared with common law. See Riparian Rights, etc.
disadvantageous side of
as favoring monopoly. See Monopoly.
dangers of, 32.
viewed with alarm in some States, 29.
arraignment of by Nebraska court, 30.
at first declared impracticable, 6.
periodical. See Periodical Appropriation.
temporary. See Temporary Appropriation.
measured by time. See Periodical Appropriation.
APPROPRIATOR. See Appropriation; Priority; Purpose of Appropriation, etc.
consent of, to changes by others, 216.
buying up land, riparian rights of, 191.
relation of, to settlers, 76, 77. See Settlers.
to the government, 49. See California Doctrine; Colorado Doctrine.
successive appropriators, 70 et seq., 197, 271, 272.
priority governs, 70, 81 et seq.
use of surplus by, 78.
prior appropriator:
relation to subsequent settlers, sec. 33.
rights of, 48, 206, 222, 235, sec. 28.
to flow of stream, 71.

[References are to Pages.]

APPROPRIATOR (Continued).
to make changes, 71. See Place of Use (Change of), etc.
to pollute water, sec. 164.
to sub-flow of appropriated stream, 129. See Streams; Sub-flow, etc.
in hydraulic mining, 235.
supplied in full in times of scarcity, 207.
must keep up dam, 249.
subsequent appropriator:
protection of, 71.
relation to prior settler, sec. 35.
right to surplus, 71.
to require prior to maintain dam, 249.
to pollute stream, 236, note.
to surplus over riparian rights, 78.
injury to, by pollution, 237.
by prior appropriator, 239.
as owner, 22, 83.
who can be an appropriator:
persons in general, sec. 48.
no discrimination, 91. See Purpose of Appropriation.
married women, 91.
minors, 91.
Indian, 92, 179.
alien, 91.
lessee, 92.
tenants in common, sec. 49.
corporations, 94, 95.
riparian proprietors, 33, 92, 93, 94.
APPROVAL OF STATE ENGINEER. See Method of Appropriating; State Engineer, etc.
indorsement of on application, is permit to proceed, 171.
filing maps after, 172.
form of, 462.
APPURTENANCE. See Conveyance; Ditches, etc.
water appurtenant to canal, 195.
water right, to ditch, 119, 182.
however long, 194.
to ditch built in two parts, 194.
may pass as, on sale of ditch, 194, 203.
water right, to land, sec. 122.
may pass as, on sale of land, 181.
not necessarily appurtenant, 181.
a question of fact, 181.

[References are to Pages.]

APPURTENANCE (Continued).
whether appurtenance or parcel, 182.
appropriation by trespasser does not become, 182.
ditch, to homestead, 179.
riparian right is not. See Riparian Rights.
AQUA CURRIT ET DEBET CURRERE, ETC., 127, 222.
ARID STATES. See Colorado Doctrine; Irrigation Codes, etc.
conditions in, 56.
common law inapplicable in, 55, 57, 58.
irrigation necessary, 56, 58, 206.
common law never in force in, secs. 19, 56, 58, 60.
legislation affecting. See Common Law; Irrigation Codes; Legislation, etc.
recent legislation in. See Irrigation Codes.
method of appropriation in, 169. See Method of Appropriating.
appropriation the sole law of waters in, 28, 40, 41.
Federal Statutes broadly construed in, 63, 65.
arid land grants of Congress in
as affecting law of waters, 64.
references to, 310.
aridity as test of value of doctrine of riparian rights, 30.
of California land, 30.
ARIZONA.
statutes of, 39, 41, 334.
law in, 38, 58.
acequias in, 39.
only statute expressly naming and rejecting common law, 41.
ARKANSAS ACT. See Swamp Lands.
concerning swamp lands, 121.
ARTIFICIAL FLOW.
substituted for natural flow, 84.
ARTIFICIAL USES. See Riparian Rights.
under law of riparian rights, 296.
reasonable quantity for, 297.
ARTIFICIAL WATERCOURSE.
is an easement, 199.
water in, 183.
is personal property, 83, 195.
cannot be appropriated, 198, sec. 68.
an article of commerce like goods or merchandise, 195.
distinguished from water right, 197, 271.
whether appurtenant to canal, 195.
law of, sec. 68 et seq.
use of water in ditches, flumes, etc., sec. 128 et seq.

[References are to Pages.]

ARTIFICIAL WATERCOURSE (Continued).
dry ravine as, 198, sec. 133.
a ditch is, 191.
waste coming from
right to, by estoppel, 271, 284.
abandonment of, 271.
adverse use of, 197, 198.
appropriation of, 198.
water from Sutro Tunnel, 196, note, 197.
water pumped from mine, 197.
AVULSION.
loss of stream by, 304.

BALANCE OF CONVENIENCE. See Injunction.
as influencing injunction, 242.
BANKS. See Bed.
BASINS.
submerged canyons as underground basins, 133.
BASIS OF LAW OF APPROPRIATION. See Federal Statutes.
BED OF STREAM. See Channel.
straightening, 160.
and banks essential to watercourse, 115.
or banks, 129.
riparian owner's title to one-half of, 293.
BEGINNING WORK.
application to State Engineer before. See Application for Permit; Diligence; Method of Appropriating, etc.
BENEFICIAL.
beneficial purpose. See Purpose of Appropriation.
beneficial use. See Actual Application.
limits quantity allowed, 190, sec. 141.
amount lost in fluming, 205.
injunction decree must be based on, 206.
BLACKSTONE.
and appropriation, 82, 289. See Common Law.
BLAZING OF TREES.
surveys, notice, stakes, and, 157.
BOARD OF IRRIGATION OR CONTROL.
determination of priorities by, 257. See Adjudication of Priorities.
organization of, 252. See Administration.
BOARD OF SUPERVISORS.
discretion of, in organizing reclamation district, 123.
in organizing irrigation district, 45.

[References are to Pages.]

BOND.
for diligent prosecution of work, 172.
of irrigation district, 45, 327.
indemnity bond, 16.
in lieu of injunction, 323.
BOUNDARIES.
State, no barriers to appropriation of stream, 117.
building ditch across. See Interstate Stream.
BRANCHES OF DITCH.
building of, 216.
use of main and branch flumes, 215.
BURDEN OF PROOF. See Presumption.
of materiality of injury, is on plaintiff, 234.
in cases of recapture of water, 264.
in suit for pollution, 234.
in cases of change of use by appropriator, 216.
that taxes were assessed, in adverse use, 282.
in cases of non-user, 269.
that lands are public, 98.

CALIFORNIA. See Appropriation; Customs of Miners; California Doctrine, etc.
doctrine of appropriation arose in, c. I.
conditions in early days. See Customs of Miners.
common law adopted in, 11, 13.
organization of courts in, 5.
public lands in, 14, 16.
pioneer conditions in, 31.
change of conditions later in, 27.
change of attitude of court in, 305.
paramount industry in, 27, 232, 287.
irrigation in, 28, 287.
aridity of parts of, 30.
common law thought rejected in, 33.
common law now of wider application in, than appropriation, 36.
new rule of underground water in. See Underground Water.
mining not a public use in, 287.
irrigation is a public use in. See Eminent Domain.
legislation in
adopting common law, 10.
adopting customs of miners, 26.
Possessory Act, of, 16.
Indemnity Act, of, 16, 19.
no recent, in, 27, 38.

[References are to Pages.]

CALIFORNIA (Continued).
concerning irrigation districts, 44, 325. See Irrigation Districts.
early mining legislation, 16.
statutes of, 316.
constitution, 316.
Civil Code, 217.
Code of Civil Procedure, 323.
Penal Code, 250, 323.
miscellaneous statutes, 324.
irrigation district statutes, 325.
Civil Code of
title "Water Rights," 317.
title "Hydraulic Mining," 321.
miscellaneous sections of, 321.
construction of section 1411, 274.
of section 1418, 164.
of section 1419, 273.
of section 1422, 34, 35, 36, 320.
is only declaratory of decisions, 26, 34, 35, 140, 146, sec. 84.
is basis of legislation elsewhere, 27.
method of appropriation under. See Method of Appropriating.
protecting riparian rights, 34.
not apply to appropriation by actual diversion, sec. 85.
failure to comply with, sec. 84.
before the code
determination of quantity appropriated, 204.
requisites of notice before the code, 146.
innovations in, 146.
scope and purpose of, 140.
to govern doctrine of relation, 88, 140.
form of notice of appropriation in, 413.
CALIFORNIA DOCTRINE. See Appropriation; Colorado Doctrine; Common Law; Settlers, etc.
States following, 37, 68.
States rejecting, 38, 63.
objections to Colorado view urged by, 63.
appropriation is a grant from United States under, secs. 24, 51, 52.
supreme court of United States and, 37.
conclusion as to, 54.
fundamental propositions of, 37, 50, 51.
not defeated by irrigation codes, 35, 41, 42.
covers defects of either system alone, 31.

[References are to Pages.]

CALIFORNIA DOCTRINE (Continued).
enforces common law and appropriation side by side, 13, 33, 35, 49, 77, 289.
protects riparian rights of prior settlers, 77, 78.
riparian rights under, 290.
appropriation by riparian owner under, 92.
derives rights of appropriator as grant from United States, see. 23 et seq.
not from the State, 51.
under acts of Congress of 1866 and 1870 (2330 and 2340, Rev. Stats.), 51, 52.
power of United States to deal with waters on public lands, 52.
legislative power of State under, 54.
meaning of "government" under, 49.
United States as owner of waters on public lands, 50, 51, 52.
CAMINETTI ACT.
scope of, 237.
CANAL. See Ditch.
grant of, reserving water right, 194, 203.
whether water flowing in is realty, 195.
appurtenance. See Appurtenance.
sale of. See Conveyance; Sale.
damage by. See Damage; Negligence.
CANAL COMPANY.
is in public service, 94.
CARE. See Diligence; Negligence.
CAREY ACT, 310.
CATCHMENT BASIN.
underground water in, 132.
CATTLE.
spreading out water for, to wallow in, is waste, 190.
watering large bands of, 297.
water for, under riparian rights, 296.
CAUSES OF ACTION. See Action; Suit, etc.
joinder of, 247.
CERTAINTY.
of decree adjusting water rights, 246.
CERTIFICATE UNDER IRRIGATION CODES. See Adjustment of Priorities; Forms; Method of Appropriating, etc.
of new appropriation, 174, secs. 115, 181.
form of, 466, 498.
issuance of, 174.

[References are to Pages.]

CERTIFICATE UNDER IRRIGATION CODES (Continued).
of completion of work. See Method of Appropriating.
form of, 434.
issuance of, 173.
not final in some States, 174.
usually final, 173.
of existing priority:
form of, 466.
filing and recording, 174, 258, 260.
issuance of, 260.
final, called license in some States, 174.
numbered consecutively, 173, 174.
CHANCE TO PREVENT.
no adverse use unless, 281.
CHANGE.
of means of use. See Ditches; Means of Use, etc.
of ditches, etc. See Ditches; Means of Use, etc.
of place of use. See Place of Use.
of point of diversion. See Place of Diversion.
of purpose of use. See Purpose of Appropriation.
or enlargement under irrigation codes. 170.
changes in ditches, etc., sec. 134.
no injury to others in making, 147.
by prior appropriator, 71.
in course of construction, 162.
of plan, non-user from, 267.
CHANNEL. See Bed and Banks; Watercourse.
necessary to watercourse, 114.
title to, is in United States or grantees of land, 84.
dry all year, usually, 114.
chance flow in, 114.
need not be full all year around, 114.
and water right, severance of, 84.
use of by several appropriators, 84.
no property in, sec. 40.
as link in ditch line, 40.
drainage of, 161.
not a way of necessity for miners, 236.
clearing out choked channel, 265.
CHARACTER OF USE. See Purpose of Appropriation.
immaterial, 220.
CITIES.
riparian rights of, 95.
appropriations by, 94.
as successors of Mexican pueblos, 4.
sewage of, injunction against, 301.

[References are to Pages.]

CITIZENS.
appropriation not limited to, 91.
CIVIL CODE OF CALIFORNIA. See California.
CIVIL LAW. See Mexican Law.
of percolating water, 228.
in Arizona, 38.
doctrine of, 8.
CLAIMANTS.
rival, principles governing, 141.
neither of whom posted notice, 151.
where no rival claimants, complete diversion enough, 141.
use of word in Civil Code of California construed, 273.
existing, form for use by, in Nebraska, 454.
in Nevada, 463.
etc. See Forms.
CLIMATE.
arid. See Arid States.
COAL MINING.
debris from, 237.
importance of water problem in, 231, note.
CODES.
irrigation codes. See Irrigation Codes.
of California. See California.
irrigation codes, States having, 39.
COLLATERAL ATTACK.
upon decree adjudicating priority, 261.
upon confirmatory decree of irrigation district, 45.
COLORADO.
no riparian rights in, 56, 144.
appropriation always existed in, 57.
filing application to appropriate in, 170.
change of point of diversion in, 260, 270.
forms used in, 415.
reservoir filing, 418.
affidavit, 420.
ditch filing, 417.
title of, in map, 416.
etc. See Forms.
statutes of
concerning riparian rights, 335.
preferences and pro-rating, 335.
administration, 336.
determination of existing prior, 336.
method of appropriation, 337.

[References are to Pages.]

COLORADO (Continued).
reservoirs, 338.
measurement of water, 338.
COLORADO DOCTRINE. See Appropriation; California Doctrine; Common Law, etc.
States following, 38, 68.
doctrine stated, 54, 55.
distinguishing features of
common law of riparian rights rejected under, 54, 55, 62.
power of State to change common law, 62.
whether riparian rights rest on local law, 65, note.
appropriation sole law of waters under, 55.
rights of appropriator derived from the State under, 55.
waters declared property of State or public, 55, 60.
United States or State under, sec. 25.
comments on, 61, sec. 26.
ratification of, by Congress, 63 et seq.
difficulties attending, 32, 61, 63 et seq.
constitutional limitations invoked, 64, 65.
due process of law, 62.
primary disposal of federal lands, 35, 62.
strongest ground of support, 66.
construction of federal statutes under, 63, 64, 66, 69.
effect of statute in establishing, 38, 60.
constitutional provisions influencing, 38, 60, 63.
supreme court of United States and, 67.
COMITY, 118. See Interstate Stream.
COMMENCING DITCH. See Diligence.
mere act of, 47.
COMMERCE.
water may be article of, 195.
COMMON LAW. See Appropriation; Riparian Rights; California Doctrine; Colorado Doctrine, etc.
why customs of miners departed therefrom, 5 et seq.
rules of, 59, 288. See Riparian Rights.
based on equality of right, 222.
under California Doctrine
of wider application than appropriation, 36.
California Civil Code and, 36.
nine States enforcing, 37.
suitability of, for West.
not adapted to pioneer conditions of early California, 5.
not adapted to conditions in arid States, 55, 57 et seq.
irrigation codes and, 144.
not in force in arid States, under Colorado view, 55, 58.

[References are to Pages.]

COMMON LAW (Continued).
seven States and Territories rejecting, 37.
by statute expressly, in Arizona only, 41.
aridity as influencing, 30.
contrasted with appropriation, 15, 82, 84, 182, 207, 222, 223, 234, 237, 289, 290.
appropriation not doctrine of, 6, 11, 12, 35, 289, 290.
attempt to blend the two into one, 10, 12, 13.
intent of original precedent, 10.
appropriation not deduced from rules of, 12.
distinction between, 15, 160.
appropriation in derogation of, 15.
whether appropriation ever the law in England, 289.
supplement each other under California doctrine, 13. See California Doctrine.
are independent, 10, 12.
attitude of California court, 305.
place of motive in, 228.
statute adopting in California, 6, 10, 13, 16.
recent legislation hostile to, 40. See Irrigation Codes; Legislation, etc.
Arizona only statute expressly mentioning, 41.
COMPLAINT. See Allegations; Pleading; Suit, etc.
cross-complaint by appropriator in suit by riparian proprietor, 249.
what must be separately stated in, 247.
for loss of percolating water, 248.
COMPLETION OF CONSTRUCTION WORK. See Construction Work; Method of Appropriating, etc.
necessity for, 157, 163, sec. 103.
what amounts to, sec. 104.
always a requisite, 159.
and appropriation by actual diversion, 159.
the prime factor in making appropriation, 159.
completion defined, 159.
reasonable time for removal of boulders, etc., 205.
time for under irrigation codes:
usually must be within five years, 172.
proof of:
necessity for proof of, 173.
maps accompanying, 173.
discretion of State Engineer in taking, 173.
certificate of, usually final, 173, 174.
not final in some States, 173.

[References are to Pages.]

COMPLETION OF CONSTRUCTION WORK (Continued).
form for proof of, 431, 433, 434.
for notice of, 428, 430.
etc. See Forms.
California code definition of, 159.
actual diversion as part of, 160.
completion without diversion, 160.
necessity of time for, 162.
actual use as element of, 166.
of ditch, final, 47.
is conducting waters to place of use, 159.
between posting notice, and, use of water by others, 149.
interval between commencement and completion, 73.
suit for diversion before completion of work, 150.
use of water by others before completion of work, 164.
intervening use ceases *ipso facto*, 164.
CONDEMNATION. See Eminent Domain.
CONDITIONAL.
appropriation is, 53, 189, sec. 45.
conditioned on beneficial use, 89.
conditional abandonment, 188.
CONDITION SUBSEQUENT.
relation does not act as, 163.
actual application as, 166.
CONFIRMATION OF APPROPRIATION. See Acquiescence; Federal Statutes, etc.
CONFIRMATORY ACT. See Irrigation Districts.
CONFLICT OF LAWS, 118. See Interstate Streams.
CONFLICT OVER RIPARIAN RIGHTS. See Appropriation; Common Law; Riparian Rights.
CONGRESS. See Act of Congress; Federal Statutes; Public Lands; United States, etc.
recognized as valid the customary law, 25.
policy of, 212.
prohibited hydraulic mining in California, 237.
CONSENT
of landowner necessary to build ditch on private land, 193.
of other appropriators removes objection to change of use, 216.
of landowner to change of line of ditch, 200.
of private landowner, to appropriation on his land, 106, sec. 60.
CONSTITUTIONAL LAW. See Due Process of Law; Eminent Domain, etc.
provisions in State constitutions.
declaring waters property of State, 38.
cannot interfere with rights on interstate stream, 119, note.

[References are to Pages.]

CONSTITUTIONAL LAW (Continued).
recognizing law of appropriation, 57.
rejecting common law of riparian rights, 63.
in States following Colorado doctrine, 38.
prohibition of monopolies not affect appropriation, 206.
limitations on State legislative power, 54, 65.
interference with primary disposal of Federal lands, 35.
interfering with vested rights. See Due Process of Law.
power of State or Territory to legislate on waters, 26.
police power of State, 26.
principles of, protect riparian rights of common law, 35, 62 et seq.
constitutionality
of Confirmatory Act, 44. See Irrigation Districts.
of eminent domain statutes, 286.
of irrigation codes, 41 et seq.
CONSTRUCTION.
of Federal statutes, 69.
broad, in arid States, 64, 65, 66, 69.
see Federal Statutes
of California Civil Code.
section 1411, 274. See Forfeiture.
of word "claimants" in sections 1418 and 1419, 273. See Forfeiture.
of section 1422. See California (Civil Code).
of Wright Act. See Irrigation Districts.
of contract:
reserving "present rights," 211.
for sale of water right, 83.
of wording of notice of appropriation
to be liberally construed, 149.
of wording, 156.
CONSTRUCTION WORK. See Actual Application; Completion of Work; Diligence, etc.
hindering construction work, 73.
protection of appropriator during, 145.
right of suit before completion of, 150.
use of water by others during, 151.
use of water oneself during, 73, 151.
use of existing ditches, 160.
of abandoned works, 160.
of works belonging to another, 161.
changes in course of, 149, 162, sec. 106.
time for beginning under Civil Code of California, 146.
delay caused by magnitude of, 149.

[References are to Pages.]

CONSTRUCTION WORK (Continued).
diligent prosecution of, 150, 151. See Diligence.
completion of. See Completion of Work.
CONSTRUCTIVE APPROPRIATION.
not possible, 140.
CONTINUOUS.
adverse use must be, 279.
CONTRACTS. See Conveyance; Sale, etc.
in general, 178, 179, 203, 293.
running with land, 179, 203.
reserving present right, construed, 211.
specific performance of parol, 183.
not to be performed within year, 204.
concerning ditches, sec. 139.
concerning water rights, sec. 120.
freedom of, concerning water rights, 178, 179.
for water supply, 179.
CONTROL, BOARD OF, 252. See Administration.
CONVEYANCE. See Contracts; Deed; Sale, etc.
of ditch, carrying water as appurtenance, 203.
of ditch reserving water right, 203.
parol, of ditch, 204.
written, preserves priority, 180.
must be written, 180.
must be recorded, 180.
in general, sec. 121.
of land, reservation of riparian rights, on, 294.
of land, carrying water right as appurtenance, 194.
statute of frauds, applied to, 88.
in general, sec. 121.
parol. See Parol Sale.
CORPORATIONS. See Appropriator.
may appropriate, 67, 94, sec. 51.
organized under territory, 95.
irrigation districts public corporations, 44.
and adverse use, 278.
organized to sell water are in commerce, 195.
application of, to appropriate, under irrigation codes, 171.
CORPOREAL.
water right is not, 89.
CORPUS OF WATER.
no property in, sec. 39.
under irrigation codes, 61.
ownership of, in law of percolating water, 295.
no ownership of, 248.

[References are to Pages.]

CORRELATIVE RIGHTS.
of landowners in percolating water, 230, 234.
COTENANT. See Tenants in Common.
suit by tenant in common against, 240.
COUNT. See Pleading.
COUNTY.
suit in one, for diversion in another, 240.
ditch in two, venue on suit, 194.
COURSE OF STREAM. See Channel.
natural changes in, 85, 304.
COURTS.
must solve difficult questions, 234, 264.
difficulty met by, in establishing law of appropriation, 31.
CRANDALL v. WOODS.
early case upholding riparian rights, 33.
CRIMINAL LAW. See Police Regulations.
poisoning water, 250.
fouling water, 250.
herding sheep into water, 250.
stealing water, 250.
injuring ditches, etc., 250.
police regulations in irrigation codes, 250, 255.
pollution dangerous to health, 235.
equity, injunction against, 250.
crimes as nuisance, 250.
provisions in Nevada statutes, 357.
provisions in Nebraska statutes, 351.
in general, see. 172.
CROPS. See Irrigation.
water needed for, by natural sub-irrigation, 226.
CROSSING.
where ditch crosses ditch, 201.
CUBIC-FOOT. See Measurement of Water.
unit of volume of water, 175.
CUSTOMS OF MINERS. See Appropriation; California; Public Lands, etc.
the basis of the law of appropriation, 145.
origin and nature of.
informal origin of, 4, 5.
grew out of pioneer conditions in California, 4.
rested on principle of first come first served, 4.
applied to everything pertaining to mining, 3, 4 et seq.
were open and notorious, 14.
why departed from the common law, 4, 5.
use of water by miners, 14 et seq.

[References are to Pages.]

CUSTOMS OF MINERS (Continued).
a comprehensive system, 24.
governmental acquiescence in, 51, 53, 97.
early California statute recognizing, 6, 24.
at first were rejected by California court, 5, 6.
California court and, 23.
miners were on public domain, 14.
tacit assent of United States, 24.
original precedent adopting, 7.
judicial notice of, 813.
presumption of governmental sanction, 15.
express sanction of United States by Acts of 1866 and 1870. See Federal Statutes.
requisites of notice of appropriation under, 146.

DAIRY.
pollution of water by, 238, note.
DAM. See Ditch; Negligence, etc.
subsequent appropriator may maintain prior, 248, 249.
removal of, mandatory injunction, 245.
raising height of, 85, 215.
preventing working of mining claim, 223.
spreading out water unnecessarily, is waste, 190.
prior appropriator must keep up, in favor of subsequent appropriator, 249.
damage by. See Negligence.
for impounding mining debris. See Debris.
sub-surface, 132.
straightening out stream by, 160.
building of, is taking possession of water, 163.
DAMAGE.
from breaking ditch, overflow, seepage, etc., 201, sec. 136. See Negligence.
from *vis major*, 202.
from melting snow flooding ditch, 202.
in seasons of high water, 202.
from unprecedented floods, 202.
for injunction
must be irreparable, 141.
must be prospective, 142.
necessity for money damage, 241, 243, 302.
necessity for, under law of riparian rights, 301.
joinder of count for, with one for damages, 247.
measure of damages:
allegation of damages, 83, 245, 248.

[References are to Pages.]

DAMAGE (Continued).
allegation of amount of, immaterial, 248.
uncertainty of, in percolating water, 129, 233.
adverse use is irrespective of amount of, 281.
DAMNUM ABSQUE INJURIA, 225, 239.
injury to subsequent appropriator may be, 239.
DATE.
at which title accrues by relation, 141, 162.
notice to fix, to which right relates back, 141.
priority dates from filing application under irrigation codes, 174.
certificates of appropriation numbered consecutively according to date of application, 174.
DAYS.
appropriation measured by months, days or parts of days, 73.
apportioning water for, under law of riparian rights, 299.
DEATH.
transfer of water rights on, 143.
DEBRIS, MINING. See Pollution.
debris cases, 232, 238.
from coal mining, 237.
from gold mining, 215.
overflow of stream carrying, 237.
distance immaterial in deposit of, 237.
discharge of into streams. See Tailings.
a public nuisance. See Nuisance; Pollution.
impounding dams for, 237.
Pennsylvania rule of, 235.
DECAY.
of ditches evidence of abandonment, 267.
DECISIONS.
State statutes prevail over, 26.
California code declaratory of, 26.
DECLARATIONS.
in notice as evidence, 148.
against interest, 186.
DECREE. See Adjustment of Priorities; Quieting Title, etc.
adjudicating priority under irrigation codes, 260.
time specified in, for actual application to use, 213.
injunction, form of, 206.
adjusting rights, must be certain, 246.
certificate of, under irrigation codes, sec. 184.
DEDICATION.
of rivers to public use. See Mexican Law.
DEED. See Conveyance; Contract; Sale, etc.
faulty, works as abandonment, 184, sec. 188.

[References are to Pages.]

DEED (Continued).
void, adverse use under, 280.
warranty, of land, does not necessarily warrant appropriation, 292.
and delivery of possession completes sale, 180.
transmits priority, 185.
DEFENSE.
necessity is not, to injunction, 243.
DEFINITION OF.
percolating water, 129, 133.
sub-flow of stream, sec. 75.
appropriation, sec. 47.
usufructuary, secs. 38, 82.
miner's inch, 72, 147.
diligence, 158.
completion of work, 159.
farming neighborhood, 287.
abandonment, 268.
public nuisance, 238.
DELAY. See Actual Application; Construction Work; Diligence, etc.
unreasonable, a question of fact, 267.
laches, or, as bar to injunction, 242.
caused by magnitude of work, 149.
DEPOSITION.
Form of for
proof of completion of works, 431, 433.
proof of application of water to use, 438, 440.
DEPRESSIONS.
in prairies not watercourses, 115.
DETERIORATION. See Pollution.
DEVELOPED WATER. See Percolating Water.
recapture of, 265.
works for in Southern California, 30, note.
produced by tunnels, 131,
in tunnel tapping streams. See Sub-flow of Stream.
DIFFUSED WATER.
surface water, 58, sec. 69. See Surface Water.
cannot be appropriated, 120.
underground. See Percolating Water.
DIKES. See Dam.
straightening out stream by, 160.
DILIGENCE. See Actual Application; Completion; Construction Work; Future Needs, etc.
defined, 158.

[References are to Pages.]

DILIGENCE (Continued).
necessity for, 47, 150, 151, sec. 100.
under irrigation codes, 172.
bond for, under irrigation codes, 172.
a universal requisite to invoking doctrine of relation, 156.
what constitutes, 157, sec. 101.
a question of fact for jury, 157.
surveys, notices, stakes, blazing of trees, 157.
unusual efforts not required, 157.
commencing work within specified time, 156.
evidence of lack of, 157.
delay in construction work. See Construction Work.
interruptions of work, 156.
difficulties of procuring labor and material, 157.
prevention by rain, snow or sickness, 156.
excusable delay, 157, 158.
must be incident to the work and not the person, 158.
in applying water to use. See Future Needs.
climate as affecting, 157.
nature of county as affecting, 157.
in applying water to irrigation, 211, 212. See Future Needs.
failure to use:
as abandonment, 266.
forfeits benefit of relation, 158, 266.
may nevertheless give right by actual diversion, 159. See Actual Diversion.
between rival claimants, 159.
and doctrine of relation, 156.
in keeping ditch in repair, 203. See Damage.
DIMINUTION. See Quantity of Water.
under law of riparian rights, sec. 223.
DISCHARGED WASTE. See Waste.
as abandonment, sec. 194.
DISCRETION.
of board of supervisors
in organizing reclamation district, 123.
in organizing irrigation districts, 45.
of State Engineer. See State Engineer.
DISCRIMINATION.
none as to who can appropriate. See Appropriator.
none as to pursuits. See Purpose of Appropriation.
DISTANT LANDS. See Place of Use.
appropriation for, 22, 23, 85, 215.
under law of riparian rights. See Riparian Land.

[References are to Pages.]

DISTANT LANDS (Continued).
appropriation of percolating water for use on, 153, 227.
use on, of percolating water, under landowner's right, 235
appropriation usually for use on, 160.
DISTINCTION.
between appropriation
and riparian right, 8, 182, 303, 304, sec. 230.
and adverse use, 283.
and prescription, 108.
between water right,
and ditch, 130, 194, 263, sec. 43.
and water in artificial watercourse, 197, 271.
between abandonment and forfeiture, 273.
between change of place of use and change of purpose of use, 218, 219.
between government as landowner and as lawmaker, 50.
between compliance with statute and appropriation by actual diversion, sec. 84.
DITCH. See Artificial Watercourse; Construction Work; Dam, etc.
to mouth of spring, 130.
evaporation or seepage from, 191, 200, 205.
completion of, 47, 205. See Completion of Work.
diligence in building. See Diligence.
capacity of limits quantity of water allowed, 205, sec. 140.
stream as link in ditch line, 264. See Recapture.
prior right to rush tailings in, 238.
contracts concerning, 203.
by mistake built on land of another, 189.
subject to mechanics' liens, execution, mortgage, 194, 204.
built in two parts, 194.
nature of right to ditch
an easement, 87, 200, 216, sec. 129.
an artificial watercourse, 191.
real estate, 191.
essence of, is right of way, 192.
not land, 162, 192.
distinguished from water right, 193, 194, 263, secs. 43, 130.
water flowing in ditch is personalty, 195.
acquisition of right to ditch
on public land
is by grant from government, 192, 199.
remains when land becomes private, 192.
by prescription, 193.
cannot be built on private land without landowner's consent, 18, 189, 193.

[References are to Pages.]

DITCH (Continued).
drainage ditch
is not an appropriation, 154.
water in, is abandoned, 270.
water from mine collected in, 197.
change of ditch. See Means of Use; Place of Use.
in general, 199, 200.
by consent of landowner, 199, 200.
building branches of, 216.
cannot be changed to pipe-line, 199, 200, 243.
from flume to ditch, 199.
cannot be forced upon ditch owner by landowner, 200.
injury to ditch:
to part, is injury to whole, 240.
to ditch built in two parts, 194.
to ditch lying in two counties or States, 194, 240.
from various causes:
sawdust clogging ditch, 223.
mud and silt, 235.
removal of support by landowner, 201.
ordinary use of land by landowner, 201.
trampling by sheep, 201.
ejectment for, 192.
injunction against, 243.
count for, cannot prove diversion of water under, 193.
repair of ditch, 74, sec. 135.
duty of, is on ditch owner, 201, 203, 216.
ditch owner has right of entry for, 201, 216.
where ditch crosses ditch, 201.
damage from break, etc., of, sec. 136. See Damage; Negligence, etc.
negligence not presumed, 202.
negligence must be shown, 202, sec. 136.
duty of ditch owner that of prudent business man, 203.
use of waste from ditch, 217, 270. See Waste.
ditch to catch waste; estoppel, 196, 271.
emptying into natural stream, 218.
ceasing abandonment of waste from, 271.
sale of ditch:
written evidence of transfer, 185.
appurtenance, 179, 182, 194.
reserving water right, 194.
does not necessarily include right to take water, 193.
by parol, 204.

[References are to Pages.]

DITCH (Continued).
loss of right to ditch
by adverse use, 197.
abandonment of, 263.
use of abandoned ditch by others, 160.
gives no right to build another in different place, 200.
not necessarily abandonment of water right, 189, 194, 263, 275.
of water from. See Waste.
form for ditch filing in Colorado, 417. See Forms.
DIVERSION. See Actual Diversion.
damages in action for, 246.
where ditch lies in two counties or States, 94, 194.
from well, 225.
point of. See Place of Diversion.
at common law. See Riparian Rights.
injunction against. See Injunction.
of percolating water. See Percolating Water.
specific finding necessary, 233.
motive as element in, 225, 227, 228.
by tunnels, 130, 230, note, 226.
in ordinary use of land, 227.
under old rule, not wrongful, 134.
mere diversion, sec. 105.
necessity of beneficial use and purpose, 48, 151.
appropriation by, 84, 140. See Actual Diversion.
by others between notice of appropriation and completion of work, 164.
DOG IN THE MANGER.
not sanctioned by appropriation, 145.
DOMESTIC USE. See Purpose of Appropriation; Riparian Rights.
appropriation for, 47, 75, 208.
preference to under irrigation codes, 208.
under law of riparian rights, 296.
DRAINAGE. See Waste.
ditch for, water in is abandoned, 154, 270.
of percolating water, 233, 227.
of springs, by mine works, 227.
and flooding, 224.
of mines, example of, 231, note.
of river system by mines, 231.
of swamp lands, reclamation districts, for, 122.
surface drainage, 115.
diversion for, not an appropriation, 154, 161.

[References are to Pages.]

DRY CHANNEL. See Watercourse.
as watercourse, 114.
DUE PROCESS OF LAW. See Constitutional Law.
protects riparian proprietor, 35.
in issuance of bonds of irrigation district, 45.
protects appropriation once made, 50.

EASEMENT.
riparian rights not an, 292.
ditch, etc., is, 199, 200, 216, sec. 129.
appropriation spoken of as, 53.
EJECTMENT. See Suit.
whether lies for ditch, 192.
from premises, 249.
EMINENT DOMAIN. See Constitutional Law.
not involved under, sec. 2339, Rev. Stats., 21, note.
constitutionality of statutes concerning, 286.
irrigation districts may exercise right of, 44.
what is a public use of water, 285, 286.
irrigation is, 286.
water for farming neighborhoods, 286.
public water supply is, 287.
mining is not in California, 287.
what can be taken on:
rights of appropriation may be taken, sec. 206.
riparian rights may be taken, sec. 206.
underground water, 132, 287.
ENGLAND.
attempt to apply appropriation, 82, note, 289.
ENLARGEMENT OF APPROPRIATION.
for future use, 211. See Future Needs.
where no other claimants, sec. 143.
form for permit to make, under irrigation codes. See Application for Permit.
ENTRY.
in land office, riparian rights as affected by, 80.
EQUALITY.
common law of riparian rights based on, 222.
pursuits in appropriating, 18, 22. See Purpose of Appropriation.
EQUITY. See Injunction; Quieting Title, etc.
jurisdiction of to restrain crimes as nuisances, 250.
specific performance of parol contract, 183.
estoppel in, 196, 285.
equitable title, 183.

[References are to Pages.]

ESTOPPEL.
in equity, 196.
as defense at law, 285.
forfeiture of water right by, 197, 284.
some degree of turpitude necessary, 196.
prescription and, concerning artificial waters, 196.
right by, to discharge from ditch, 271.
what not sufficient to raise, 196.
mere silence does not raise, 204, 285.
of upper riparian owner, 303.
EVAPORATION.
loss by, 190, 191.
and seepage from ditch as waste, 191.
EVIDENCE.
parol, to show sale of water right, 185, 187.
written, of transfer of water right, 185.
gathered by division engineer under irrigation codes, 258.
in cases of recapture, 264.
taken in adjudicating priorities under irrigation codes, 260.
of non-user, 267.
of appropriation, 157.
of sub-flow of stream, 126.
of customs of miners. See Customs of Miners.
of intention of appropriator, sec. 98.
of abandonment, 263.
parol sale is, 187.
evidence rebutting abandonment, 268.
EXAMINATION BY STATE ENGINEER.
of application for permit. See Application for Permit.
of actual use of water. See Actual Application.
EXCLUSIVE.
right of appropriation is, 222, sec. 41.
contrasted in this respect with common law, 84.
EXCUSE.
good motive as in diverting percolating water, 228.
legitimate mining as, in diverting percolating water, 230.
necessity is not. See Necessity.
EXECUTION.
sale of water right on, 180.
EXERCISE OF RIGHT. See Means of Use; Quantity of Water, etc.
EXPRESS GRANT. See Grant.
appropriator holds right under, sec. 53.
EXTENT OF RIGHT. See Exercise of Right.

[References are to Pages.]

FAILURE.
to post notice, sec. 93.
of diligence, 189, sec. 102.
to comply with statute. See Forfeiture.

FARM.
and garden, 206.
farming neighborhoods, 286.

FAULTY DEED. See Parol Sale.
grantee on, is appropriator by actual diversion, 184.
as abandonment, 265.

FEDERAL QUESTION, 241.

FEDERAL STATUTES. See Public Lands; United States, etc.
sanctioned local customs laws and decisions, 21.
purpose of—to prevent loss of possessory rights on sale of public lands, 21.
lack of care in early Federal statutes, 69.
granted right of way over public lands, 20.
protected settlers from injury, 20.
construction of
statutes 1866 and 1870 (Rev. Stats. 2339, 2340) 55, 63 et seq.
under Colorado doctrine, 64, 66, 69.
by supreme court of United States, 21, 67.
before 1866, 23.
of 1866 and 1870, construction of, *supra*.
did not establish a new right, 25.
are basis of law of appropriation, 25.
obscure wording of, 20.
gave sanction to existing system, 20, 24.
history of, 11.
comments on, 19, sec. 11.
references to miscellaneous, 310.
arid land acts, 310.
Carey Act, 310.
in full:
statutes of 1866 and 1870 (Rev. Stats. 2339, 2340), 19, 309.
National Irrigation Act, 311.

FEES OF STATE ENGINEER.
Idaho, 345.
Nebraska, 351.
North Dakota, 365.
Oregon, 371.
Utah, 383.
See individual States.

[References are to Pages.]

FINDING OF COURT.
concerning percolating water, must be specific, 233.
quieting title must be specific, 246.
FIRST COME FIRST SERVED.
as basis of law of appropriation, 4.
FISH.
appliances injurious to, 250.
riparian owner's right to, 293.
appropriation for stranding fish, 154.
FIVE YEARS. See Adverse Use; Forfeiture.
non-user for, as causing forfeiture, 269, 273, 274, 276.
FLOODING. See Drainage.
of mining claim, 215.
FLOODS. See Damage; Drainage; Surface Water.
that may be anticipated, 202.
unprecedented, 202.
periodical, 202.
FLOUR-MILL.
appropriation for, 74.
FLOW OF STREAM.
no presumption of, 114.
tendency to, necessary to watercourse, 114.
continual, unnecessary to watercourse, 115.
chance flow in usually dry channel, 114.
right to natural flow, 217.
irregularity of, 224.
stoppage of, from natural causes, 267.
FLUMES. See Ditches.
FORCE.
or fraud, no adverse use by, 280.
use of, in protecting water right. See Physical Force.
FORECLOSURE.
of mechanic's lien built in two parts, 194.
FORFEITURE. See Abandonment; Nonuser.
distinguished from abandonment, 269, 273, 275.
nature of forfeiture:
acts *in invitum*, 269, 275.
intent not to abandon immaterial, 269, 276.
ground for forfeiture:
failure to comply with statute in making appropriation, 141, sec. 192 et seq. See Actual Diversion; Diligence; Notice, etc.
benefit of doctrine of relation lost, 168, 266.
appropriator by actual diversion not affected by, 273.

[References are to Pages.]

FORFEITURE (Continued).
Civil Code of California, 1419, as causing forfeiture, 273.
from nonuser:
adoption of rule, 270, 274.
for five years, 269, 270, 273, 274, 275, 276.
Civil Code of California, 1411, as creating, 274.
as affecting future needs in irrigation, 277.
under irrigation codes, 276.
time limit of non-user under irrigation codes, 277.
not result from mere silence, 286.
of benefit of doctrine of relation, 168, 266.
under irrigation codes, 276.
by estoppel, 197.
of priority, change of use does not result in, 190.
of land as affecting appropriation:
appropriation on forfeited land, 99, 106.
forfeited railway grant, 99.
mining location, 99.
FORMS.
notice of appropriation, 413, sec. 90.
California:
notice of appropriation, 413, sec. 90.
Colorado, 415.
for title of map, 416.
for ditch filing, 417.
reservoir filing, 418.
affidavit, 420.
Idaho, 425.
application for permit to appropriate, 425.
notice of proof of completion of work, 428.
same for publication, 430.
proof of completion, deposition of holder, 431.
same—deposition of witness, 433.
certificate of completion of work, 434.
notice of application to use, 435.
same—for publication, 437.
proof of application to use—deposition of holder, 438.
same—deposition of witness.
water license (final certificate), 441.
application for transfer of water right, 443.
same—notice for publication, 447.
Nebraska, 449.
application for permit to appropriate, 449.
plat accompanying same, 454, 516.

[References are to Pages.]

FORMS (Continued).
claim of existing owner, 454.
plat accompanying same, 516.
Nevada, 460.
application for permit to appropriate, 460.
same—notice for publication, 462.
approval of State Engineer, 462.
claim of existing owner, 463.
certificate of appropriation for existing owners, 466.
plat accompanying application, 515.
North Dakota:
application for permit to appropriate, 468.
application for permit to enlarge, 474.
notice of application—for publication, 480.
proof of publication, 480.
maps, 480.
Utah:
application for permit to appropriate.
for power, 485.
for mining, 490.
for irrigation, 495.
proof of appropriation, 495.
certificate of appropriation, 498.
Wyoming, 500.
application for permit.
to appropriate, 500.
to enlarge, 503.
to build reservoir and divert water, 507.
to build reservoir and store water, 511.
forms of plats, 515, 517.
FRANCHISE.
water right spoken of as, 89.
FRAUD.
no adverse use by force or, 280.
FRAUDS. See Statute of Frauds.
FRESHETS, 115.
FRONTAGE ON STREAM. See Riparian Rights.
not sole measure of riparian right, 297.
FURROWING LAND.
failure to, before irrigating, not waste, 191.
FUTURE NEEDS. See Actual Application; Quantity of Water.
appropriation for future improvement and extended irrigation of land, 47.
history of irrigation in Idaho, 212.
irrigation by poor men, 212.

[References are to Pages.]

FUTURE NEEDS (Continued).
purpose of public land laws of Congress, 212.
appropriations by settlers before lands ready to irrigate, 213.
the law and irrigation, 214.
future enlargement by irrigator, 209, 210, 211, 277.
how future needs calculated, sec. 146.
limitations on appropriation for future needs.
water must be actually used within reasonable time:
failure to, is abandonment, 210.
what is reasonable time, 210.
failure to, for five years, whether forfeiture, 211.
diligence in applying water to use, 166, 211. See Actual Application.
under irrigation codes, time specified in application for permit, 213.
time specified in adjusting priorities, 213.
must not be mere afterthought, 212, 213.
must be part of enterprise in view at time of appropriating, 213.
must not exceed original capacity of ditch, 47, 211.
construction of contract reserving present right, 211.
temporary appropriation by others of water claimed for, 212. See Temporary Appropriation.

GOVERNMENT.
silent acquiescence of, 9, 91.
meaning of, under California doctrine, 49.
relation of appropriator to. See California Doctrine; Colorado Doctrine.

GRANT. See Conveyance; Public Lands; Sale; Settlers, etc.
appropriation is a grant from government, 15, 52, 72, 81, 91, 111, 184, sec. 24.
originally presumed from silent acquiescence, 53.
now resting on statutes of 1866 and 1870 (Rev. Stats., 2339, 2340), 52 et seq.
conditional character of grant, 53.
whether grant is express or implied, 53, 108.
cannot be interfered with without due process of law, 54, 348.
conflicting, between appropriator and settler. See California Doctrine; Riparian Rights; Settlers.
public land grants
subject to all prior appropriations:
railway grants, 76.
mineral land, 76.
homestead, 76.

[References are to Pages.]

GRANT (Continued).
Mexican grants.
riparian rights attach, 50, 80.
grant by riparian proprietor, 293.
grant by appropriator
is complete on delivery of deed and possession, 180.
presumed on adverse use, 278.
faulty deed, 184.
parol sale. See Parol Sale.
California doctrine rests on, from government, 55.
of right of way over public lands, 20.
GRAVEL.
underground water accumulated in, 126, 132.
GRIST-MILL.
change of use from sawmill to, 219.
GROUND WATER. See Underground Water.
GUADALUPE HIDALGO.
treaty of, 50.

HEADGATE.
measuring devices, etc., 255.
HEALTH.
pollution dangerous to, a crime, 235.
HEREDITAMENT.
incorporeal, water right is, sec. 46.
HIGH WATER.
damage in seasons of, 202.
HISTORY.
of irrigation in Idaho, 212.
of irrigation code legislation, 331.
of law of appropriation, c. I. See Appropriation.
of possessory rights on public domain, 88.
of mineral lands, 21.
of appropriation as branch of mining law, 4.
HOLLOWS.
water flowing in, not watercourse, 115.
HOMESTEAD. See Public Lands.
water right appurtenant to, 179.
statutes, effect of on sale of water right, 179.
appropriation made on, 106.
riparian rights of, 76.
HOSTILE.
adverse use must be, 279.
hostile appropriation on private land, sec. 59.
HOTEL.
pollution by refuse from, 239.

[References are to Pages.]

HOW AN APPROPRIATION IS MADE. See Method of Appropriation.
in California—the original method, c. VI.
under irrigation codes, c. VII.
HYDRAULIC MINING. See Debris; Pollution.
as public nuisance, 235 et seq.
impounding dams for, 237.
provisions for, in California Civil Code, 321.
prohibited by Congress in California, 237.
pollution by, injunction, 236.
pollution by, prior right to, 235.
HYDRAULIC RAMS.
use of, 189.

IDAHO.
appropriation in, 59.
preference to mining in, 209.
effect of local customs and rules in, 175.
statutes, 335.
declaration of State ownership, 339.
concerning riparian rights, 339.
concerning administration, 339.
for determination of existing priorities, 341.
method of appropriating, 341.
measurement of water, 344.
preferences and pro-rating, 344.
fees of State Engineer, 345.
constitution, 344.
forms used in:
application for permit to appropriate, 425.
proof of completion of work, 431, 433.
same—notice for publication, 428, 430.
certificate of completion of work, 434.
same—for publication, 437.
water license, 441.
application for permit to transfer water right, 443.
same—notice for publication, 447.
IMPAIRING OBLIGATION OF CONTRACT, 54.
IMPARTIALITY. See Purpose of Appropriation.
INAPPLICABILITY OF COMMON LAW, 57, 59.
INCH.
miner's, 72, 147. See Miner's Inch.
INCIDENT.
right to water an, to Federal title to public land, 50, 52.

[References are to Pages.]

INCIDENT (Continued).
whether appropriation is, to land, 182.
riparian right is, to land, 292.
INCORPOREAL HEREDITAMENT.
water right is, sec. 46.
is not land, 89.
is not corporeal, 89.
no tenancy can exist in water right, 89.
appropriation is, sec. 46.
INDEMNITY ACT.
early California statute, 16, 19.
INDEPENDENT.
water right and title to land are, 181, sec. 42.
appropriation and the common law of riparian rights are, 12, 289, 290, 291.
INDIAN.
appropriation by, 92, 154, 179.
sale of water right by, 179.
INDORSEMENT OF APPLICATION. See Application for Permit.
INDUSTRY. See Purpose of Appropriation.
paramount, 305.
INFILTRATING. See Percolating Water.
through soil, underground water, 129.
IN INVITUM.
forfeiture acts, 269.
INJUNCTION. See Equity; Injury; Quieting Title; Suit, etc.
object of granting, 242.
preliminary injunction, 244.
mandatory, to compel removal of obstructions, 245.
motive as influencing, 233, 244.
who can get injunction, sec. 165.
lessee against stranger, 240.
reversioner, 302.
riparian owner, 301.
though not using the water, 301.
requisites for injunction, sec. 167.
making out right at law not necessary, 242, 245.
good faith; buying up rights with view to litigation, 244.
damage as influencing
must be irreparable, 241.
restoring amount diverted prevents, 242.
acts that would ripen into prescription are, 241.
must be prospective, 242.
past injury will not support, 242.
money damage as affecting, 241, 243.

[References are to Pages.]

INJUNCTION (Continued).
in suit by landowner for percolating water, 302.
in suit by riparian owner, 301.
defenses to injunction:
laches or delay will bar, 242.
bad faith will bar, 244.
balance of convenience or comparative hardships as defense, 242.
necessity is no defense, 243.
rights of strangers to suit cannot be set up, 240.
bond in lieu of injunction, 323.
procedure on injunction:
joinder of parties, 247.
joinder with suit for damages, 247.
decree, form of, 206.
what can be enjoined:
works of miners, 243.
injury to property rights in ditches, 243.
pollution by hydraulic mining, 236.
city sewage, 301.
waste of water, 190.
tailings from stamp-mill, 238.
sluice mining, 236.
diversion of percolating water. See Percolating Water.
crimes enjoined as nuisances, 250.
INJURY. See Damages; Diversion; Injunction; Suit, etc.
protection against, 149.
by diversion, sec. 55. See Quantity of Water, etc.
by pollution, sec. 161. See Pollution, etc.
must be material, 48.
the sole test under appropriation, 222, secs. 153, 161.
burden of proving materiality is on plaintiff, 234.
from sawdust, mine tailings, etc. See Pollution.
to others in making changes, 147. See Means and Use; Place of Use; Purpose, etc.
not permitted, 216.
change of ditch not permitted, 200.
means of use can be changed if no one injured, 190.
change of place of diversion or use or purpose of use, sec. 149.
complaint by riparian proprietors under California doctrine, 215.
burden of proof that change injures others, 216.
appliances injurious to fish, 250.
from diversion by percolation, sec. 157. See Percolating Water.

[References are to Pages.]

INJURY (Continued).
from break, etc., of ditch, reservoir, etc. See Damage; Negligence.
past injury, will not support an injunction, 242.
to part of ditch is injury to whole, 240.
INSOLVENCY.
as influencing injunction, 244, 245.
INSURER.
appropriator not, 201.
miner to agriculturist, 231.
INTENTION. See Malice; Motive.
to apply water to beneficial use. See Purpose of Appropriation.
must be *bona fide*, 165.
in irrigation, 166.
necessity for, 47, 86.
notice of. See Notice of Appropriation.
evidence of, sec. 98.
alone not enough, sec. 99.
to recapture water added to stream. See Recapture.
prevents abandonment, 264.
to abandon, 186, 276. See Abandonment; Forfeiture.
concurrence of act and intent necessary, 263, 268.
not regarded in cases of forfeiture. See Forfeiture.
whether water right passes on sale of ditch is a question of, 203.
malice or intent to injure another. See Malice; Motive.
INTERMEDIATE SUBDIVISION. See Administration.
for supervision of appropriation under irrigation codes, sec. 175.
INTERMITTENT STREAMS, 124.
INTERPRETATION OF STATUTES, ETC. See Construction of Statutes.
INTERRUPTION.
of adverse use, verbal objection not, 282.
INTERSTATE STREAM.
riparian rights in one State protected on whole stream, 118.
constitutional declaration that waters are property of State cannot interfere with appropriation of, 119, note.
may be appropriated, 118.
conflict of laws, sec. 67.
pollution of, 119.
INTERVAL.
between commencement and completion of construction work, 73. See Temporary Appropriation.
IRREPARABLE.
damage for injunction must be, 241.

[References are to Pages.]

IRRIGATION. See Irrigation Codes; Irrigation Districts; Purpose of Appropriation, etc.
the law and, 214, sec. 14.
antiquity of, 58.
a prolific source of litigation, 246.
mining displaced by, as paramount industry in California, 232, 287.
percolation from, into mines, 232.
history of, in Idaho, 212.
necessity for, in West, 28 et seq., 56, 58.
appropriation for, 17, 18, 25, 46, 73, 74, 92, 117, 154, sec. 145.
during irrigation season, 206.
need not have immediate use for water, 213.
having no lands is evidence of bad faith, 86, 166.
Utah form of application for permit to water, 492.
in dry season, 207.
quantity for, 211.
watering garden patch cannot found claim to irrigate farm, 206.
limit of right for, 46, 47.
maximum quantity for under irrigation codes, 175, 176, 332.
three acre-feet per year, 175.
second-foot for seventy acres the usual limit, 175.
change to, from use for power purposes, 219.
under riparian rights at common law. See Riparian Land; Riparian Rights, etc.
riparian rights as favoring, 29.
cannot irrigate non-riparian land, 299.
quantity for, 296, 298.
is a reasonable use, 291, 297.
future needs for. See Future Needs.
increase of needs, 209, 210, 277.
irrigation by poor men, 212.
time for actually using water for, 210.
five years as limit, 211.
diligence in applying water to use, 212.
delay caused by breaking ditch, 157.
water for crops in natural sub-irrigation, 226.
use of Kern river for, 34.
need not furrow land before irrigating, 191.
taking on eminent domain for. See Eminent Domain.
prescriptive rights to, 198.
preference to, under irrigation codes, 208.
boards of irrigation, 252. See Administration.

[References are to Pages.]

IRRIGATION (Continued).
interference with by miners, 17. See Debris; Pollution, etc.
appropriation as an irrigation doctrine, 31.
effect of recent legislation, 38.
irrigation codes. See Irrigation Codes.
irrigation districts under Wright Act. See Irrigation Districts.
National Irrigation Act, 43, 311.
IRRIGATION CODES. See Forms; Statutes, and under individual States.
history of, 331.
in arid States, 27, 75.
States having, 39.
in States following California doctrine, 42.
significant features of, 251.
mostly of recent adoption, 38.
cover all uses of water, 170, 260.
essentials of:
declarations in, concerning State control, sec. 173.
chiefly administrative, 39.
supervision of appropriators under. See Administration.
method of appropriating under. See Method of Appropriating.
adjustment of existing priorities under. See Adjustment.
actual application of water to use under, 213. See Actual Application.
transfer of water right under, 86.
lakes and ponds may be appropriated under, 121.
time limit for non-user under, 277.
police regulations of, 250, 255.
measurement of water under, sec. 117.
special provisions for times of scarcity, 207, 208, sec. 144.
preferences and pro-rating under, 207, 208, sec. 144.
doctrine of relation under, sec. 116.
effect on riparian rights, 144.
cannot destroy existing riparian rights, 42.
comments on, 358.
changing or enlarging an appropriation under, 170.
State Engineer under. See State Engineer.
water divisions, water districts, water commissioners. See Administration.
IRRIGATION DISTRICTS. See Irrigation, etc.
statutes for, 45, 254, 325.
first California statute, 43.

[References are to Pages.]

IRRIGATION DISTRICTS (Continued).
Wright Act, constitutionality of, 44, 46.
Confirmatory Act, constitutionality of, 44.
present California statutes, 44, 325.
do not change substantive law of waters, 43.
saving clauses, in, 327.
states having, 46, 328.
decisions concerning, 45.
appropriation by, 94.
organization of, 44, 45, 325.
bonds of, 44, 45, 327.
assessments by, 45, 327.
are public corporations, 44.
collateral attack on confirmatory decree, 45.
landowners in, rights of, 44.
eminent domain exercised by, 44.
officers of, 326.
directors of, 326.
property of, 326.
operations of, 326.
elections in, 327.
inclusion and exclusion of land, 43, 44, 45, 327.
dissolution of, 328.

JACKSON CREEK, 264.
JOINDER. See Pleading; Suit.
of causes of action, 247.
of parties, 247.
of counts for injunction and for damages, 247.
of counts for injury to water right and for injury to ditch, 247.
JOINT TENANCY. See Tenants in Common.
JUDICIAL LEGISLATION, 274, 291, note.
establishment of doctrine of appropriation was, secs. 8, 9.
JUDICIAL NOTICE.
of customs, 8, 9, 13.
JURISDICTION. See State; Suit, etc.
of justice of peace, in suit for diversion, 88.
original, of supreme court of United States in case of interstate stream, 119.
over interstate stream. See Interstate Stream.
of equity. See Equity.
original, of supreme court of United States, 241.
of Federal courts, 241.
of court, to determine priorities, 258.

[References are to Pages.]

JURY.
abandonment is a question of fact for, 268.
JUSTICE OF THE PEACE.
jurisdiction of, in suit for diversion, 88.

KANSAS.
statute of concerning underground water, 134.
method of appropriating in, 138.
statutes of, 346.
follows California doctrine upholding riparian rights at common law, 37.
KATZ v. WALKINSHAW.
establishing new rule of underground waters, 131.
extensive *dicta* in, 131.
facts in, 132.
KERN RIVER.
use of, for irrigation, 34.

LABOR.
difficulty of procuring, excuses delay, 127.
LACHES. See Diligence; Injunction.
a bar to injunction, 242.
LAKES AND PONDS.
may be appropriated under irrigation codes, 121.
may be appropriated in California, 121.
subterranean, 132.
Lake Tahoe, 117.
riparian rights attach to, 121, 294.
appropriation of waters of, 23, sec. 70.
fouling water in, a crime, 250.
LAND. See Landowner; Private Land; Public Land; Riparian Land.
appropriator need not locate any, 139.
water right not, 89.
distant, use of water on, 85.
swamp lands, sec. 71.
ownership of, unnecessary, sec. 83.
saturated with water, 132.
non-riparian, no riparian right to irrigate, 299.
contracts running with the, 179, 203.
obstructions placed on another's, 249.
reservation of riparian rights, on conveyance of, 299.
water appropriated by a trespasser does not become appurtenant to, 182.
adverse use of, as affecting water right, 279.
prior location of, for depositing tailings, 238.

[References are to Pages.]

LAND (Continued).
ditch is not, 192.
statute of limitations concerning, applies to water rights, 180.
riparian right passes *ipso facto* on sale of, 292.
sale of, without mentioning appurtenance, may pass water right, 181.
may appropriate before land in condition to irrigate, 213.
warranty deed of, not necessarily warrant appropriation, 292.
failure to furrow, not waste, 191.
water right sold separate from, 181.
title to, not test of being riparian, 299.
riparian right cannot be used on non-riparian, 299.
water right not necessarily appurtenant to, 181.
riparian right part and parcel of, 292.

LANDLORD AND TENANT.
adverse use against tenant as affecting landlord, 278.
suit against stranger by landlord, 240.
injunction by tenant against stranger, 240.
contract concerning appropriation cannot create relation of, 89.
tenant may appropriate, 92.

LANDOWNER. See Public Land; Riparian Rights; Settlers, etc.
appropriation by, on his own land, sec. 60 et seq.
owns diffused surface water, 120.
government as, 50.
later grants and prior appropriations, sec. 154.
right to use water, 28. See Riparian Rights.
in irrigation district, 44.
ditch owner cannot be forced to make change by, 200.
right of, to underground water though he has sunk no well, 246.
right of, to dig wells to get percolating water, 295.
right of, to percolating water, 230, 234, 294.
cannot make ditch owner substitute pipe-line for ditch, 200.
may use land in ordinary way though ditch injured thereby, 201.
cannot remove support of ditch, 201.
consent of, to change of line of ditch, 200.
no duty, to repair ditch, 201.

LAPSE OF TIME. See Adverse Use; Non-user, etc.

LAW.
equitable estoppel as defense at, 285.
establishing right at, before injunction, 245.
and irrigation, sec. 14.

LAWMAKER.
government as, distinguished from landowner, 50.

[References are to Pages.]

LEGISLATION. See Federal Statutes; Irrigation Codes; Statutes, and under individual States.
constitutional limitations on. See Constitutional Law.
early legislation
adopting common law in California, 6, 10.
adopting customs of miners in California, 6.
favoring miners in California, 16.
absence of, directly affecting waters, 9, 11.
before 1866, 23.
Federal statutes. See Federal Statutes.
recent legislation.
effect of irrigation upon, 38.
concerning irrigation districts. See Irrigation Districts.
in 1905, 39.
features of, 39, 40, 15. See Irrigation Codes.
chiefly administrative, 39.
borrowed from California Civil Code, 27.
in California, 26, 27.
States having, 39.
future legislation indicated by resolutions of State Engineers, 40.
effect of on common law of riparian rights
expressly rejecting, 41.
hostile to, 40.
cannot destroy, where previously in force, 42, 43.
judicial legislation, 13, 274, 291, note.
police power of State, 26.
territorial valid as well as State, 26, 67.
LESSEE. See Landlord and Tenant.
appropriation by, 92.
LICENSE.
appropriation spoken of as, 51, 53, 89, 108, 162, 163, 183.
possessory rights on public domain, origin of on theory of license, 51.
presumption of from government, 162.
water license under irrigation codes. See Method of Appropriating.
final certificate in some States called water license, 174.
recording, 174.
form used in issuance of, 441.
LIMIT. See Measurement; Quantity.
for irrigation, second-foot for seventy acres usually, 175.
LIMITATIONS. See Statute of Limitations.
LITIGATION. See Suit.
percolating water, supreme court of California does not fear serious, from new rule of, 133.

[References are to Pages.]

LITIGATION (Continued).
irrigation said to give rise to much, 246.
buying up rights with a view to, 224.

LOCAL CUSTOMS, LAW AND DECISIONS. See Appropriation; Customs of Miners.
effect of, in Idaho, 175.
whether riparian rights are a matter of local law, 65, note.
confirmed by Federal statutes.
union of the three not necessary, 26.
State statutes prevail over customs or decisions, 26.

LOCATION.
of placer mining claim, not *per se* an appropriation, 144.
of land by appropriator unnecessary, 139.
prior, of land, co-ordinate with prior appropriation of water under California doctrine, 88. See Settlers.

LOS ANGELES.
as successor of pueblo, 4, 95.

LOSS. See Abandonment, etc.
of right on natural stream by estoppel, 284.
of priority on parol sale, 266.
in transmission by ditch, 200, 205.
of right, c. XII.
non-user for five years causes loss of right regardless of intent, 269.
of priority, 216, 219, 220.
amount lost in necessary fluming added to beneficial use, 205.
of riparian right by natural causes, 304.
of riparian right, 302.

LUX v. HAGGIN. See California Doctrine.
decided on constitutional principles, 35.
established California doctrine, 36, 37.
declared appropriation and common law both in force in California, 36.
riparian rights before, sec. 15.
principle of, approved in nine States, sec. 18.
result of, secs. 17, 35, 36.
principles of, rejected in seven States, sec. 19.

MACHINERY. See Power.
water for, under riparian rights, 296.

MALICE. See Intention; Motive.
in diverting percolating water, 227, 228, note, 229, note.
in making an appropriation, 155, 162.

MANDATORY INJUNCTION. See Injunction.

[References are to Pages.]

MANNER OF USE. See Ditches, etc.
change of.
increasing quantity, not allowed, 191.
allowed where others not injured, 190.
does not forfeit priority, 190.
limitations on, sec. 125.
under riparian rights, 300, sec. 221.
MAPS.
Nevada form of plat, 515.
Nebraska form of, 516.
township plat, 516.
title of, Colorado form, 416.
necessity for, 257, 258.
duplicate, accompanying application, 170.
filing of, after approval of application, 172.
on making proof of completion, 173.
in North Dakota, 258.
MARRIED WOMEN.
appropriation by, 91.
MATERIALITY OF INJURY. See Injury.
governs right to recover, secs. 153, 161.
must be, to recover, 48.
MAXIM. See Qui Prior Est In Tempore, etc.; Aqua Currit, etc.; Sic Utere Tuo, etc.
MAXIMUM. See Irrigation; Measurement; Quantity of Water.
three acre-feet per year, in irrigation, 175.
allowed for irrigation, 175, 176.
MEANS OF USE. See Ditches, etc.
change of, where allowed, 147, 190.
reservoir, 18.
indicate quantity appropriated, 190, 204.
MEASURE OF DAMAGES. See Damages.
for diversion, 245, 246, 248.
MEASUREMENT OF WATER.
second-foot usually unit of, of flow, 175.
cubic-foot and acre-foot units of volume, 175.
miner's inch under irrigation codes, 175.
maximum allowed for irrigation under irrigation codes, 175.
second-foot for each seventy acres irrigated is the usual limit, 175.
effect of local customs and rules, in Idaho, 175.
three acre-feet per year as maximum for irrigation in Nevada, 175.
South Dakota statute for, of water, 375.
keeping headgates measuring devices, etc., 255.

[References are to Pages.]

MEASUREMENT OF WATER (Continued).
Colorado statutes for, of water, 363.
measurement of capacity of ditch, 205.
units of, 176.
Nebraska statute for, of water, 351.
Nevada statute for, of water, 356.
Oklahoma statute for, of water, 368.
North Dakota statute for, of water, 365.
Idaho statute for, of water, 344.
capacity of ditch as measure of right, 72.
by miner's inch, 148.
under four-inch pressure, 147.
under irrigation codes, sec. 117.
MECHANIC'S LIEN.
foreclosure of, on ditch built in two parts, 194.
ditch and water rights subject to, 204.
MERGER.
no merger of appropriation and riparian rights, 93.
METHOD OF APPROPRIATING (Original Method).
States where in force, sec. 81.
origin of original method, sec. 82.
equivalent to taking possession of water, 139.
constructive appropriation not possible, 140.
no appropriation by prescription, 140.
need not locate any land, sec. 83.
involving several streams, 156.
between rival claimants, 141, 150, 151.
mere settlement on banks of stream not enough, 143.
taking up millsite not an appropriation, 143.
location of placer claim not an appropriation, 143.
summary of rules governing original method, sec. 110.
by actual diversion without compliance with statute, sec. 140. See Actual Diversion.
by compliance with statute. See California (Civil Code).
California Civil Code chiefly declaratory only, sec. 89.
innovations in California Civil Code, 146.
fixes time for beginning work, 146.
scope and purpose is to fix date of relation, 141.
forfeiture for non-compliance with statute, 141. See Forfeiture.
four requisites stated, 146.
notice of appropriation must be posted. See Notice of Appropriation.
beneficial purpose necessary. See Purpose of Appropriation.
diligence in construction work. See Diligence.

[References are to Pages.]

METHOD OF APPROPRIATING (Continued).
completion of work. See Completion of Work.
actual application of water to use. See Actual Application.
relating back. See Relation.
right of suit before completion of work, 150.
for underground water. See Percolating Water.
notice in, sec. 95.
doctrine of relation applied, 153.
by a reservoir, 155. See Reservoirs.
for temporary purpose. See Temporary Appropriation.
METHOD OF APPROPRIATING UNDER IRRIGATION CODES, c. VII.
new method, 139.
an essential feature of new legislation, 169.
comprehensive, in arid States, 169.
States where, is in force, 169.
essentials of, 169.
doctrine of relation under, 169.
actual application of water to the use, 170.
purpose of appropriation, 170.
irrigation codes apply to all uses, 170.
changing or enlarging appropriation under irrigation codes, 170.
changes in point of diversion in Colorado, 170.
application for permit to appropriate, sec. 112.
application must be in duplicate, 170.
application must be filed within sixty days in Colorado, 170.
with whom application is filed, 170.
form of application, 170. See Forms; Application for Permit, etc.
contents of application, 170.
duplicate maps accompany application, 170.
application of corporation to appropriate, 171.
discretion of State Engineer in calling for additional information, 171.
examination by State Engineer, 171.
calling for additional information, 171.
returning the application to be corrected, 171.
recording application in office of State Engineer, 171.
recording all papers in general with State Engineer, 171.
approval of application:
publication of notice of application, 171.
indorsement of State Engineer on application, 171.
indorsement of approval is a permit to proceed, 171.
appeal from decision of State Engineer on application, 171.

[References are to Pages.]

METHOD OF APPROPRIATING UNDER IRRIGATION CODES (Continued).
prosecution of the work, sec. 114.
filing of maps after approval of application, 172.
necessity of diligence under irrigation codes, 172.
time for beginning work under irrigation codes, 172.
filing bond in Idaho for diligent prosecution of work, 172.
completion of work, 172.
proof of completion of work under irrigation codes, 173.
publication of proof, 173.
examination by State Engineer, 173.
certificate of completion issued by State Engineer, 173.
necessity of maps on making proof of completion, 173.
discretion of State Engineer in taking proof of completion, 173.
certificate of appropriation following completion usually issues as final certificate, 173.
exceptions where completion is not final, 173.
certificate of appropriation, sec. 115.
certificates numbered consecutively, 173.
doctrine of relation applied under irrigation codes, 173.
issuance of certificate of appropriation, 174.
recording certificate of appropriation, 174.
certificate issued on completion not final in some States, 174.
issuance of license in some States, 174.
notice of actual application and use in some States, 174.
examination by State Engineer of actual use, 174.
final certificate in these States called license, 174.
numbered according to date of original application for permit, 174.
recording license, 174.
doctrine of relation, sec. 116.
priority dates from filing of original application, 174.
work usually required to be completed within five years under irrigation code, 172.
requirement in some States that one-fifth of the work must be done in one-half the time allowed, 172.
Colorado statute, 337.
Idaho statute, 341.
Nebraska statute, 350.
Nevada statute, 355.
New Mexico statute, 362.
North Dakota statute, 364.
Oklahoma statute, 368.
Oregon statute, 370.
South Dakota statute, 374.
Utah statute, 381.

[References are to Pages.]

MEXICAN GRANTS.
riparian rights of, 35, 50.
MEXICAN LAW.
Mexicans in California, 1.
weakness of Mexican law in California, 3, 4.
regarded waters as owned by pueblos, 4, 95.
free use for neighborhood, 4.
cities to-day relying on early Mexican law, 4.
rights of riparian proprietors under, 4.
rights of Los Angeles resulting from, 4.
affecting law of Arizona, 39.
MILLS.
flour, appropriation for, 74.
power for, 72.
millsite, taking up, is not an appropriation, 143.
MINERAL LANDS.
history of, 21.
MINERS. See Customs of Miners.
early use of water by, 14.
paramount rights of, in early days, 9, 18.
judicial notice of customs of, 13.
customs of, secs. 3, 11.
no right to ditch over land of another, 18.
no rights to interfere with irrigator, 17.
early favoritism to, 16.
Pennsylvania rules of debris favors, against agriculturists, 235.
muddying stream, 235.
channel as a natural outlet for discharge of tailings by, 236.
present disadvantage of, in controversy with irrigator, 232.
injunction against, 243.
cannot cut off percolations feeding a stream, 230.
channel not a way of necessity for, 236.
no favor to, in building ditches, 193.
MINER'S INCH.
statutes fixing, 148.
what is, 147.
use of, 72, 147.
measurement of water by, 148, 175.
MINING. See Customs of Miners; Miners; Mining Claims, etc.
appropriation for, 74, 91.
application for permit to appropriate for, Utah form, 490.
waste water pumped from, 197. See Abandonment; Waste.
and irrigation in California, 222, 287.
not a public use on eminent domain in California, 287.
mining regions, agricultural patents in, 77, note.

[References are to Pages.]

MINING (Continued).
no preference to, to-day in California, 27, 75.
preference to, in Idaho, 209.
influence of, on law of appropriation, 305.
appropriation historically a branch of mining law, 4.
gave rise to original precedent, 7.
novelty of questions arising out of, 8.
early mining legislation influencing, 16.
favoritism to, in early days, 16.
no longer paramount industry in California, 27, 75, 232, 287.
pollution of streams by. See Pollution.
mining debris enjoined, see. 163.
protection of agriculturist against pollution by, 236.
dependence of mining on use of streams for tailings, 236, note.
hydraulic mining prohibited in California, 237.
priority as sanctioning, 237.
as affected by law of underground waters, 135, 231, 232, note, sec. 160.
importance of question in mining regions, 231, note, see. 60.
legitimate work of mining, whether excuse for diverting, 227, 230.
seepage from irrigation into mines, 232.
drainage of ground water by mines:
shaft continuously lifts percolating water, 231.
water level inclines toward mine shaft, 231.
example of drainage by, 231, note.
drainage of spring by mine, 227.
drainage of sub-flow of stream by mine, 230.
drainage of river system by mine, 231, note.
MINING CLAIM.
parol conveyance of, 184.
water flooding, 215.
dam preventing working of, 223.
riparian rights of, 33, 80, 144.
MISTAKE.
ditch built by, on land of another, 189.
MIXTURE. See Recapture.
water added to stream treated on principles of, 264.
burden of proof is on party causing the, 264.
MOLLITER MANUS IMPOSUIT, 249.
MONOPOLY.
not sanctioned by law of appropriation, 145, 163, 206.
view that appropriation favors, 29.
appropriation and, 48, 305.
constitutional prohibition of, not applied to appropriation, 206.

[References are to Pages.]

MONTANA.
statutes of, 347.
State lands in, 98.
method of appropriating, 138.
appropriation by actual diversion in, 142.
the common law of riparian rights in, 29, 37, 118.
MONTH.
appropriation measured by months, days, or parts of days, 73.
MORTGAGE.
ditch and water right subject to, 204.
MOTIVE. See Intention.
in making appropriation, sec. 97.
malice immaterial in making an appropriation, 155.
as affecting injunction, 233.
materiality of, in diversion of percolating water, 228, 230, 233, sec. 159.
MUNICIPAL CORPORATIONS.
appropriation by, 95.
supplying water to, is a public use, 94, 316.

NATIONAL IRRIGATION ACT.
does not directly affect law of waters, 43.
effect of, 43.
subordinate to State law, 43.
in full, 311.
NATURAL.
natural water, law of not applied to artificial watercourse, sec. 132.
natural causes, loss of riparian right by, 304.
natural deficiency, who bears loss in time of, 207. See Quantity.
NATURAL FLOW.
artificial flow substituted for, 84.
right to, 217.
NATURAL RIGHT.
riparian right is, 292.
NATURAL USES.
under law of riparian rights, 296, sec. 216.
use for irrigation is subordinate to, sec. 216.
riparian proprietor may take whole stream for, 296.
NATURE OF.
appropriation, 178, c. II.
riparian rights, 292, sec. 119.
NAVIGABLE STREAMS. See Streams; Rivers; Watercourses.
appropriation of, sec. 66.
title to bed of, is in State, 116.

[References are to Pages.]

NAVIGABLE STREAMS (Continued).
nature of rights in, 116.
dam in, 116.
obstruction of, by mining debris, 236, 238.
easement of public in, 116.
NEBRASKA.
arraignment of law of appropriation in, 30.
upheld riparian rights in spite of irrigation statute, 42, 348
statutes of, 348.
declaration of State ownership, 348.
concerning riparian rights, 348.
concerning preferences and pro-rating, 349.
concerning administration, 349.
determining existing priorities, 349.
method of appropriating, 350.
measurement of water, 351.
fees, 351.
crimes, 351.
forms used in. See Forms.
application to appropriate, 449.
claim of existing owner, 454.
plat accompanying application, 454, 516, etc.
NECESSITY.
no defense to trespasser, 244.
no defense to injunction, 243.
channel as way of, for mine tailings, 236.
NEGLIGENCE. See Damage; Diligence, etc.
damage from breaking ditches, sec. 136.
appropriator not an insurer, 201.
damage from breaking overflow seepage or escape of water, 201.
reservoir not built at appropriator's peril, 202.
must be shown to hold ditch owner liable for break or overflow, 202.
breaking ditch not *res ipsa loquitur*, 201.
not presumed from mere fact of breaking of ditch, 202.
ordinary rule of, applies from damage to ditches, 202.
damage from *vis major*, 202.
damage from unprecedented floods, 202.
damage from periodical floods, 202.
damage in seasons of high water, 202.
damage from melting snow flooding ditch, 202.
floods that may be anticipated, 202.
ditch owner has duty of repair, 203.
diligence required of ditch owner in keeping repair, 203.
duty of ditch owner that of prudent business man, 203.
seepage caused by activity of some burrowing animal, 203.

[References are to Pages.]

NEVADA.
three acre-feet per year formerly maximum in, 175.
conditions in, favoring appropriation, 29, 353.
the common law of riparian rights in, 359.
the law of appropriation in, 57.
courts reject riparian rights *in toto*, 37, 360.
statutes of:
declaration of State ownership, 353.
concerning riparian right, 354.
concerning administration, 354.
determining existing priorities, 354.
method of appropriating, 355.
for measurement of water, 356.
criminal provisions, 357.
irrigation districts, statute, 357.
comments on Nevada irrigation code, 358.
forms used in, 460, 515.
application for permit to appropriate, 460.
notice of same for publication, 462.
claim of existing owner, 463.
certificate of appropriation for existing owner, 466.
etc. See Forms.
NEW MEXICO.
statutes of:
declaration of State ownership, 361.
concerning riparian right, 361.
concerning administration, 361.
determining existing priorities, 361.
method of appropriating, 362.
measurement of water, 363.
miscellaneous provisions, 362.
courts reject riparian rights *in toto*, sec. 19.
NON-USER. See Abandonment; Forfeiture, etc.
principles governing, sec. 190.
evidence of, 267.
and abandonment, 266, 276.
non-user for reasonable time is not abandonment, 266, 268.
difficulty of rule of reasonable time, 269.
a question of fact for jury, 267.
at start of appropriation, 267.
caused by change of plans or breakage of apparatus, 267.
temporary non-user, 267.
caused by stream ceasing to flow, 267.
caused by tortious act of third person, 267.
burden of proof in cases of non-user, 269.

[References are to Pages.]

NON-USER (Continued).
and forfeiture.
non-user for five years, 269, 273, 274, 276.
adoption of rule of forfeiture from, 270.
time limit on non-user, 277.
under irrigation codes, 277.
resulting from Civil Code of California, 1419. See Forfeiture.
resulting from Civil Code of California, 1411. See Forfeiture.
of water held for future irrigation. See Future Needs.
actual application of water to use. See Actual Application.
NORTH DAKOTA.
statutes of, 363.
declaration of State ownership, 363.
concerning riparian rights, 363.
concerning administration, 363.
concerning existing priorities, 364.
method of appropriating, 364.
measurement of water, 365.
fees of State Engineer, 365.
provisions, 365.
forms used in:
application for permit to appropriate, 468.
application for permit to enlarge, 474.
notice for publication, of application to appropriate, 480.
proof of publication, 480.
etc. See Forms.
NOTICE OF APPROPRIATION. See Method of Appropriating; Notice Under Irrigation Codes, etc.
necessity for posting:
failure to post notice, 151, sec. 93.
posting a second notice, 164.
changes in notice, 147, 149.
place of posting, 414.
object of posting, sec. 91 et seq.
places a limit on quantity appropriated, 148, 204.
preserves evidence by recording, 148.
operates as a warning, sec. 92.
fixes date to which right relates back, 148, 164. See Relation.
not *per se* a withdrawal of water, 149.
use of water by others after posting notice, 149.
rival claimants, neither of whom has posted notice, 150, 151.
declarations in, as evidence, 148.

[References are to Pages.]

NOTICE OF APPROPRIATION (Continued).
recording of, 147, 148.
faulty, effect of, 151.
alone, gives no right, 145, sec. 94.
as affecting adverse use, 279.
statements required in, 147.
right relates back to posting of, 148.
liberally construed, 149.
written, not needed before California Civil Code, 146.
in appropriating sub-flow of stream, 128.
in appropriating underground water, sec. 95.
form of notice of appropriation, 90, 413.
NOTICE UNDER IRRIGATION CODES. See Notice of Appropriation.
of actual application to use, in some States, 174, 435, 437.
of application for permit, publication of, 171.
of investigation by State Engineer, 257.
of survey by State Engineer, 258.
of transfer of water right, 447.
of application for permit, 467. See Method of Appropriating.
NUISANCE.
crimes may be enjoined as, 250.
interference with water right is a private, 245.
reservoir as, 74.
tailings not *per se*, 256, note.
public nuisance. See Mining; Pollution; Tailings, etc.
pollution held to be, 238.
tailings held to be, 236.
not sanctioned by priority or prescription, 238.
injunction against. See Injunction.

OBSTRUCTION.
placed on another's land, 249.
mandatory injunction ordering removal of, 245.
OCCUPANT OF LAND. See Settler.
prior, protected against later appropriators under California doctrine, 34. See Riparian Proprietor.
OKLAHOMA.
statutes of, 367.
concerning riparian rights, 367.
concerning administration, 367.
concerning existing priorities, 367.
method of appropriating, 368.
measurement of water, 268.
miscellaneous statutory provisions, 368.

[References are to Pages.]

OREGON.
statutes of, 370.
method of appropriating, 370.
for adjusting priorities, 371.
for fees of State Engineer, 371.
court upholds common law of riparian rights, sec. 18.
ORIGIN. See Appropriation.
of original method of appropriating, 97, c. I, secs. 82, 107.
of doctrine of relation, sec. 107.
ORIGINAL PRECEDENT.
Irwin v. Phillips, 7.
parties in, 7.
OVERFLOW.
grass produced by, of river, not an appropriation, 154.
of dam, liability for. See Negligence.
of river carrying mining debris, 237.
damage from, 201. See Damage.
negligence must be shown, 202. See Negligence.
OWNER. See Ownership.
United States as, of land and water. See Public Lands.
appropriator spoken of as, 22, 83.
private, of land, appropriation by, on his own land, 106.
rights of, against another using his ditch, 161.
riparian. See Riparian Proprietor; Settler, etc.
OWNERSHIP.
of land, not needed for appropriation, secs. 42, 83. See Appropriation.
of public lands, 49. See Public Lands.
of lands, absence of is evidence against *bona fide* intention of irrigator, 86.
acts constituting, 163.
of land, ditch owner has none, 192.
none, in *corpus* of water, 64, 248.

PACIFIC COAST.
universal application of appropriation on, 48.
PARAMOUNT INDUSTRY.
irrigation or mining as, in California, 75, 232, 305.
PARCEL.
appurtenance or, 181, 182.
riparian right is part and parcel of land, 292, sec. 229.
PARENS PATRIAE.
suit by State acting as, 241.
PAROL CONTRACT. See Parol Sale.
executed, rule of, 187.

[References are to Pages.]

PAROL CONTRACT (Continued).
specific performance of. See Contract; Equity, etc.
to furnish water at all times, 204.
PAROL SALE OR FAULTY DEED. See Conveyance; Statute of Frauds, etc.
peculiarity of the law, of, 183.
specific performance of contract for, through part performance, 183, 187.
statute of frauds, and, 183.
equitable title to water rights, 183.
statute of frauds and possessory rights on public domain, 184.
supreme court of the United States and possessory rights, 184.
grantee taking possession on, 184, 188, sec. 123.
rights of grantee on, or faulty deed, 184.
grantee on, or faulty deed, a new appropriator by actual diversion, 184, 266.
grantee on, or faulty deed loses priority, 184, 266.
successor in interest, 184.
written evidence of transfer of right to ditch, 185.
proof of sale of water right by oral evidence, 185.
grantee on, does not succeed to rights of grantor, 185.
deed required to transmit priority, 185.
surrender and admittance, 265.
acts as abandonment, 186, 265.
grantee on, new appropriator by actual diversion, 186.
implied abandonment, 186.
effect of abandonment, 186.
works *ipso facto* as an abandonment, 186.
intent to relinquish water right, 186.
admissible as evidence to show abandonment, 187.
evidence of, inadmissible to prove title, 187.
confers no title but subsequent use is an appropriation by grantee, 187.
opposition to rule that, is an abandonment, 187.
rights of squatter to water right, 187.
sale sometimes held to transmit priority, 188.
weakness of rule that, operates by way of abandonment, 188.
conditional abandonment as affecting, 188.
of ditch, 204.
appropriator by actual diversion, and, 266.
conveyance of mining claims, 184.
PARTIES. See Pleading; Suit, etc.
who can sue, sec. 165.
suit may be brought by tenant against stranger, 240.

[References are to Pages.]

PARTIES (Continued).
injunction by lessee against stranger, 240.
suit against stranger by landlord, 240.
suit by tenant in common against co-tenant, 240.
suit by one tenant in common alone against stranger, 240.
partition suit between tenants in common, 240.
sale on partition suit between tenants in common, 240.
rights of strangers cannot be set up in suit, 240.
joinder of, in injunction suit, 247.
joinder of, in action for damages, 247.
to suit for specific performance, 183.
PARTITION.
sale on, 92.
water right not subject of, 92.
on suit between tenants in common 240.
PATENT TO LAND. See Public Land; Settlers, etc.
prior settlers before, rights of, sec. 36.
agricultural, in mining regions, 77, note.
prior appropriations expressly excepted out o-, 77, note.
rights of patentee of land, 57.
issuance of, not required to protect riparian rights, 80.
power of government to annex conditions to, 53.
title under, when vests, sec. 36.
PAYMENT.
for land, not required to protect riparian rights, 80.
PEACEABLE.
whether adverse use must be, 283.
PENAL CODE.
of California, 250, 323.
PERCOLATING WATER. See Sub-flow of Streams; Underground Water.
defined, 120, 133.
nature of, 129.
must be unconnected with any stream, 129.
distinguished from underground stream, 124.
from sub-flow of stream, 125.
old rule of, 134, 224.
absolute right under old rule, 134.
no action for diversion of, 134.
no value in percolating water recognized, 134, 287.
old rule stated, 134.
new rule of:
tendency of law concerning, 129, 130, 134, 225.
effect of new rule, 134.
foundation of new rule, 131.

[References are to Pages.]

PERCOLATING WATER (Continued).
difficulties of new rule:
uncertainty of damages, 233.
court must make specific findings, 233.
intrinsic difficulty of questions not prevent court from undertaking to solve them, 234.
difficulty arising out of motive. See *infra*.
difficulty arising in mining regions. See *infra*.
serious litigation not feared by California court, 133.
may be appropriated, 134, 299, sec. 78.
developing water by tunnels, 131, 132.
priority governs, 131.
right of prior settlers, 131.
may be for use on distant lands, 153, 227.
limitations on right to appropriate, 133.
notice of appropriation, 152, 413.
doctrine of relation applied, 153.
diversion of appropriated water by percolation:
Katz v. Walkinshaw, 131.
injury from, secs. 157, 158.
by tunnels
cutting off supply of stream, 130, 226.
cutting off supply of springs, 130, 226.
affecting flow of stream, 225, 226. See Sub-flow of Stream.
tapping saturated bed, 132.
in mining regions, sec. 160. See *infra*.
by sub-surface dam, 132.
by wells, 225.
from springs, 130, 226.
from wells, 225.
from saturated land, 132, 226.
changing level of ground water, 226.
natural conditions affecting percolation, 134.
indefinite movements of, 224.
moving toward stream, 130.
seeping from stream, 130. See Sub-flow of Streams.
supplying springs, 130, 229, note.
level of ground water in wells, 226.
underground reservoir, sec. 79.
facts in Katz v. Walkinshaw, 132.
whether new rule limited to, 133.
Kansas statute concerning, 134.
taking on eminent domain, 132.

[References are to Pages.]

PERCOLATING WATER (Continued).
submerged catchment basins, 131, 132.
land saturated with water, 132.
plane of saturation, 132.
underflow in natural sub-irrigation, 226.
correlative rights of landowners, 131, 230, 294, sec. 214.
landowner's right to dig wells, 295.
cannot use for distant lands, sec. 214.
whether owns *corpus* of percolating water, 298.
motive in the law of underground water, sec. 159.
diverting in the ordinary use of one's land, 227.
working of a mine draining springs of another, 227.
mining as a reasonable use of one's land, 227.
drainage and, 227.
malice or intent to injure another in diverting, 227.
obstructing or changing percolations to or from neighbor's land by mining, 227.
civil law of, 228.
motive as justifying diversion by percolation, 228.
good motive as excuse in, 228.
place of motive in the common law, 228.
motive in the California law of, 228.
question of malice, 228, note, 229, note.
digging in the soil for purpose of profit, 229, note.
tunnel collecting percolating water for commercial purpose, 229, note.
miner cannot cut off, feeding a stream, 230.
legitimate work of mining is no excuse in, 230.
mine shaft withdrawing by percolation sub-flow of a stream, 230.
summary of recent cases and motive in, 230.
development works in Southern California, 230, note.
tunnels for diverting, in mining regions, sec. 160.
importance of question in mining regions, 135, sec. 160.
water level inclines toward mine shaft, 231.
mines may drain water supply of whole river system, 231.
miner an insurer to agriculturist against dessication, 231.
vis major and, 231.
act of God, and, 231.
example of drainage by mine, 231, note.
importance of the water problem in mining, 231, note.
new rule of percolating water may prevent winning metals of inestimable value, 232, note.
no limit of space on rule of, 232, note.

[References are to Pages.]

PERCOLATING WATER (Continued).
present disadvantage of miner in controversy with irrigator, 232.
percolation from irrigation into mines, 232.
seepage water from irrigation preventing working of mine, 232.
debris cases, 232.
mining displaced by irrigation as paramount industry in California, 232.
taking on eminent domain, 132, 287.
water supply of San Rafael, 229, note.
complaint for loss of, 248.
adverse use of, 281.
ownership of *corpus* of, 298.
damage from flooding by seepage water, 232.
pollution of, 239, note.
PERIODICAL APPROPRIATION.
in general, sec. 30.
appropriation by months, days, or parts of days, 72.
appropriation during dry season, 73.
PERMISSION. See Consent.
to make changes, 199.
as affecting adverse use, 280.
mere silence is not. See Estoppel.
PERMIT. See Application for Permit; Method of Appropriating Under Irrigation Codes.
PERSONAL PROPERTY.
water in artificial watercourse is, 83, 195, 270, sec. 131.
water right is not. See Real Property.
PERSONS. See Corporations.
who can appropriate, sec. 48. See Appropriator.
who can sue. See Parties to Suit.
PHANTOM OF RIPARIAN RIGHTS, 28.
PHYSICAL FORCE. See Trespass.
use of, to protect appropriation, sec. 171.
putting trespassers off one's property, 249.
molliter manus imposuit, 249.
ejection from possession, 249.
obstructions placed on another's land, 249.
subsequent appropriator may himself maintain prior's dam, 249.
PIONEER CASE.
establishing doctrine of appropriation, 7.
establishing doctrine of relation, 162.
establishing law of sub-flow, 126.
establishing law of percolating water, 131.

[References are to Pages.]

PIONEER DOCTRINE.
appropriation is, 30.
PIPES.
pipe-line, 206.
change from ditch to, 199.
less loss in, than in ditch, 191.
stealing water from, 30.
piping off springs, 130.
PLACE OF DIVERSION. See Place of Use, etc.
is immaterial, 111.
principles governing location of, 63.
use of double point of diversion, 215.
use of main and branch flume, 215, 216.
on public land. See Public Land.
usually is on public land, 96.
on state lands, 98, sec. 64.
swamp lands, sec. 98.
presumption that lands are public, sec. 55.
on forfeited public land:
railway grant, 99, 106.
mining claim, 99, 106.
on private land:
on riparian land, 93.
on homestead, 106.
rights of landowner cannot be set up if a stranger to suit. 106, 169, 240.
generally invalid, 99.
hostile to landowner, sec. 59.
initiated by a trespass, 103, 106.
with consent of landowner, 106, sec. 60.
by landowner himself, 111, sec. 61.
change of, 147.
method of, in Colorado, 170, 260.
necessity in mining in early days, 216.
priority not lost by, 216.
limitations on change, 217.
others must not be injured, 217.
PLACE OF USE. See Place of Diversion, etc.
is immaterial, 220.
appropriation for distant land, 22, 23, 215.
what is proper place, sec. 148.
title in, not needed by appropriator, 91.
under common law, must be on riparian land. See Riparian Rights.

[References are to Pages.]

PLACE OF USE (Continued).
change of, 272.
building branches of ditches, 216.
extending main ditch to new localities, 216.
raising dam, 215.
limitations on change, sec. 148.
no injury to others in making change, 216, sec. 149.
no injury to riparian proprietors under California doctrine, 215.
later acts of appropriators, 215.
cannot make change requiring additional water, 215.
change flooding mining claims, 215.
cannot change arbitrarily and at will, 216.
changes in ditches, etc. See Ditches.
consent of others removes objection, 216.
burden of proving injury from change, 216.
change of place of discharging waste from ditches. See Abandonment; Waste.
rights of lower claimants using the waste, 218.
conducting water to, is completion of appropriation, 159.
preparation of, reasonable time for, 165.
must be stated in notice of appropriation, 147.
need not be alleged in complaint, 248.
in appropriation of underground water. See Percolating Water.
PLACER CLAIM. See Mining.
location of, not *per se* an appropriation, 144.
change of use from, to quartz mining, 219.
PLANE OF SATURATION.
in underground water, 132.
PLAT. See Maps.
PLEADING.
rights of appropriation, sec. 170.
joinder of parties, 247.
joinder of causes of action, 247.
joinder of count for injunction with one for damages, 247.
joinder of parties in injunction suit, 247.
joinder of parties in action for damages, 247.
joinder of count for injury to water right and one for injury to ditch, 247.
what must be separately stated in complaint, 247.
allegations in complaint, 248.
adverse use, 278.
on adjudication of priorities, 260.
right by adverse use, 283.
riparian rights, 302, sec. 225.

[References are to Pages.]

POINT OF DIVERSION. See Place of Diversion.
POISONING WATER.
in spring or reservoir, 250.
POLICE POWER. See Police Regulations.
constitutes field for State legislation, 54.
State legislation justified under, 26.
statutes for adjudicating priorities are, 257.
POLICE REGULATIONS. See Police Power.
under irrigation codes, 250, secs. 144, 177.
POLLUTION OF WATER.
materiality of injury to quality is test, sec. 161.
appropriation and common law of riparian rights contrasted, 234.
water substantially fit for prior appropriator, 234.
burden of proving materiality of injury is upon plaintiff, 234.
placer mining and muddy water, 234.
slight diminution or deterioration, 235.
examples of unlawful pollution, 235.
miners muddying stream, 235.
prior appropriator in hydraulic mining protected, 235.
of stream by tailings, 235.
protection of prior appropriator's tail-race, 235.
prior appropriator's ditch filled by mud and silt, 235.
sawdust polluting stream, 235.
dangerous to health, is a crime, 235.
tailings from a stamp-mill enjoined, 238.
power company interfered with by tailings, 238.
by a dairy, 238, note.
by a sawmill, 238, note.
by refuse from a hotel, 239.
mining debris, sec. 163.
Pennsylvania rule of debris favors miners against agriculturists, 235.
channel as a natural outlet for discharge of tailings by miners, 236.
channel not a way of necessity for miners, 236.
injunctions against pollution, 236. See Injunction.
protection of agriculturists against, by mining, 236.
by sluice mining enjoined, 236.
injunction against, by hydraulic mining, 236.
materiality of injury by, 236, note.
depositing tailings in streams, 236, note.
protection of prior appropriator against tailings, 236, note.
tailings not a nuisance *per se*, 236, note.
dependence of mining on use of streams for tailings, 236, note.

[References are to Pages.]

POLLUTION OF WATER (Continued).
debris from coal mining, 237.
overflow of a stream carrying debris, 237.
distance immaterial in deposit of debris, 237.
hydraulic mining prohibited by Congress in California, 237.
scope of Caminetti act, 237.
priority in pollution of water, sec. 164.
right of prior appropriator to, pollute water, sec. 164.
and subsequent appropriator, 237.
appropriation and common law of riparian rights, contrasted, 237.
prior location of land for depositing tailings, 238.
priority sanctioning rushing tailings across land in a ditch, 238.
priority on public land, 238.
doubt as to priority sanctioning, 238.
debris cases, 238.
priority or prescription not sanction public nuisance, 238.
pollution held to be a public nuisance, 238.
public nuisance defined, 238.
priority may sanction pollution, 239.
injury to subsequent appropriator by prior, is *damnum absque injuria*, 239.
pollution of underground waters, 239, note.
pollution under riparian rights, 301.
of interstate stream, 119.
PONDS. See Lakes.
lakes and ponds, sec. 70.
POROUS GROUND.
as underground reservoir, 132.
POSSESSION. See Possessory Rights.
of land not needed for appropriation, 85, 139.
appropriation the equivalent of taking, of water, 139, 162, 163.
naked, of land, gives no right to water, 81.
without title, 34, 81, 187, 188.
requisites of, as to water, 163.
of water building dam is taking, 163.
ejectment from, 249.
deed and, completes sale, 180.
POSSESSORY ACT, 16.
POSSESSORY RIGHTS. See Customs of Miners.
water right of appropriation is a, 22, 88, 139, 153.
Federal Statutes sanctioned system of, 21.
as grants from the government, 15.

[References are to Pages.]

POSSESSORY RIGHTS (Continued).
possessory act of California, 18.
a comprehensive system, 24.
as tenancies at will in early days, 8.
nature of, 183, 265.
supreme court of United States and, 184.
statute of frauds and, 184.
POWER. See Machinery.
use of water for, interfered with by mine tailings, 238.
change of use from, to irrigation, 219.
PRAIRIES.
depressions in, are not watercourses, 115.
PRE-EMPTION. See Patent; Settler; Public Lands.
PREFERENCES. See Apportioning; Quantity, etc.
pro-rating under irrigation codes in times of scarcity, 207
none in apportioning in California, 247.
to mining in mining districts—in Idaho, 209.
Colorado statutes concerning, and pro-rating, 335.
Idaho constitution for, and pro-rating, 344.
Utah statute for, and pro-rating, 382.
Nebraska statutes concerning, and pro-rating, 349.
to domestic use and irrigation under irrigation codes, 208, sec. 144.
PRESCRIPTION. See Adverse Use.
estoppel or, to discharge from artificial watercourse, 196, 197, 271.
estoppel or, below against upper riparian owner, 303.
rights to irrigation by, 198.
right to ditch by, 193.
right of, 275.
or priority not sanction pollution, 238.
estoppel or, to waste, 271.
act which would ripen into, is irreparable, 241.
appropriation not based on, 140, sec. 58.
appropriation distinguished from, 108.
against United States, 108, 140.
rights acquired by. See Adverse Use.
PRESSURE.
measurement of water in California under four-inch, 147.
PRESUMPTION. See Burden of Proof.
against existence of underground stream, 124.
that lands are public, 98, sec. 55.
of continuance of flow of water, 114.
of grant from United States in early days, 53.
is basis of law of appropriation, 13, 15.
of license to appropriate.

[References are to Pages.]

PRESUMPTION (Continued).
of negligence from break of ditch, 202.
of abandonment, 269.
of grant on adverse use, 278.
PREVENTION.
by rain or snow, 156. See Diligence.
PRIMARY DISPOSAL.
of Federal lands, as affecting appropriation, 35, 62, 67.
PRIMARY SUBDIVISIONS.
administrative, under irrigation codes, sec. 176. See Administration.
PRIOR.
prior appropriator. See Appropriator.
prior settler. See Settler.
PRIORITY. See Adjustment of Priority; Appropriator, etc.
parol sale, causes loss of, 184, 188, 266.
sale in writing transmits, 180, 184, 185.
how computed, 168.
between appropriators, sec. 28.
governs their rights, 70, 75.
certificate of. See Adjustment of Priorities Under Irrigation Codes.
dates from posting of notice or filing application for permit. See Method of Appropriation; Relation.
between settlers and appropriators, 34, 71.
prior settlers before patent, 36.
prior settlers have better right under California doctrine, 79.
jurisdiction of court to determine, 258.
determination and adjudication of. See Adjustment of Priority; Quieting Title, etc.
effect of priority
whether sanctions pollution of waters, secs. 164, 238, 239.
gives right to rush tailings in ditch over land, 238.
loss of priority, 216, 219, 220.
change of place of use or diversion does not cause, 190, 216.
by parol sale, 180, 184, 185.
change of use does not cause, 190, 216.
in claims to percolating water, 151.
in appropriation of sub-flow of stream priority governs, 127.
on right by adverse use, 278.
PRIVATE LAND.
ditch on, without consent of landowner, 193.
burden of ditch remains when public land becomes, 192.
growth of, in California, sec. 13.
in early cases no claim of private title to land, 7.

[References are to Pages.]

PRIVATE LAND (Continued).
appropriation on. See Place of Diversion.
with consent of landowner, 106, sec. 60.
by landowner himself, 111, sec. 60.
hostile to landowner, sec. 59.
strangers to landowner cannot raise question, 106, 169, 240.
PRIVILEGE.
appropriation spoken of as a, 88, 89.
PROCEDURE. See Pleading.
in determining existing priorities under irrigation codes, secs. 180, 183.
PROOF.
form of notice of, to use, 437.
of completion of work, maps, 173.
form of making, of completion of work, 495.
Idaho form of notice of, of completion of work, 428.
of sale of water right by oral evidence, 185.
Utah form of, of appropriation, 495.
publication of, 173.
PROPERTY. See Personal Property; Real Property.
in channel, sec. 40.
in *corpus* of water, sec. 39.
in waters by State, under constitutions, 55.
in waters, United States as riparian owner, 68.
PRO-RATING. See Preferences.
under irrigation codes, sec. 144.
PROSECUTION OF WORK. See Method of Appropriating Under Irrigation Codes; Construction Work, etc.
bond for, 172.
must be diligent, 47, sec. 114. See Diligence.
PROTECTION OF THE RIGHT, c. IX.
materiality of injury is the test, sec. 153.
appropriation and the common law contrasted, 222.
equality of right under common law, 222.
aqua currit, etc., 222.
reasonable use under riparian rights, 222.
exclusiveness of right of appropriation, 222.
test of injury to appropriator, 222.
what diminution of quantity or deterioration in quality is an invasion of the right, 222.
right of prior appropriator to complain, 222.
later grants of land subject to prior appropriations, sec. 154.
of riparian proprietors, by constitutions, 35.
general rules of, of riparian rights, sec. 222.
during construction work, 145.
of subsequent appropriator, 71.

[References are to Pages.]

PUBLIC.
waters declared property of, 60.
policy, underground water, and, 135.
service, canal companies are in, 94.
use. See Eminent Domain.
nuisance. See Nuisance.
land. See Public Land.
PUBLICATION. See Notice.
Idaho form of notice for, for completion, 430.
of notice of application, 171.
Idaho form of notice, for transfer of water right, 447.
of proof, 173.
North Dakota form for, of notice to appropriate, 480.
North Dakota form of proof of, 480.
of notice of application to use, 437.
PUBLIC LANDS. See Appropriation; Customs of Miners; Settlers, etc.
in early days
were mostly mineral lands, 9.
possessory rights on, 88, 183, 265.
unrestrained occupation, 8, 24.
tacit acquiescence of government. See Appropriation, etc.
as tenancies at will, 8.
statute of frauds on transfer of, 184.
first appropriations were all on, 7, sec. 52.
rights of United States to, as affecting appropriation of water:
nature of title of United States to lands, 50.
State cannot interfere with primary disposal of water on, 35, 62, 67.
power of United States to deal with waters on, 52.
United States as riparian proprietor because of, 35, 50, 51, 52.
policy of United States as shown by arid land grants, 64.
policy of land laws of Congress, 212.
rights of private persons on. See Settlers.
patents to private persons, 80.
settlers may have riparian rights under California doctrine. See California Doctrine.
naked possession gives no riparian rights, 81.
appropriation by squatter, 187.
injury to settlers on, 20.
priority the governing rule, 238.
later grants all subject to prior appropriations:
mining grants, 76.

[References are to Pages.]

PUBLIC LANDS (Continued).
railway grants, 76.
homestead, 76.
forfeited lands, appropriation thereon, 106. See Forfeiture.
ownership of, 49.
no presumption that lands are public, 98, sec. 55.
are mostly Federal lands, 21.
State lands, sec. 54.
State and United States with respect to, 8, c. II.
PUBLIC USE. See Eminent Domain.
mining not, in California, 287.
irrigation is, 286.
taking water for a public water supply is, 287.
public use, 285.
use of water a, 251.
PUEBLOS.
Mexican, water right of, 95.
Los Angeles as successor of, 4, 95.
water held by, in trust for neighborhood, 3.
PUMPS.
water raised by, from mine, property in, 197, 198.
use of, by riparian owner, 300.
use of, 189.
PURCHASE.
of riparian land by appropriator, 93, 94.
PURPOSE OF APPROPRIATION.
means used and purpose indicate amount appropriated, 204.
must be stated in notice of appropriation, 147.
must be beneficial, 47, 48, 53, 74, 89, 96, 141, 153, 161, 189, 190.
waste not sanctioned. See Waste.
failure to apply water to, 267. See Abandonment; Actual Application; Nonuser.
for future use. See Future Needs.
a condition on appropriation, 53.
what is a proper purpose, secs. 96, 148.
character of use immaterial, 220.
all pursuits allowed, 31, 155, 170, 220.
early preference to mining, 16.
no preference to mining to-day, 10, 17, 18.
no partiality aside from irrigation codes, 10, 17, 18, 22, 31, 47, 91, 155, 170, 220, sec. 32.
preferences under irrigation codes, 75, 208. See Preferences.
to domestic use, 75, 208.
to irrigation, 75, 208.
to mining in Idaho, 208.

[References are to Pages.]

PURPOSE OF APPROPRIATION (Continued).
examples of beneficial purpose, 154.
agricultural purposes, 188.
commercial purposes, tunnel collecting percolating water for, 229, note.
future use. See Future Needs.
mining, c. I.
irrigation, 17, 18, 25, 46, 47, 154.
domestic use, 47, 75, 208.
for sale of water, 7, 155.
sawmill, 9, 17.
watering stock, 47.
stranding fish, 154.
use by Indians, 154.
examples of what is not a beneficial purpose:
waste, 153.
drainage ditch, 154, 161.
speculation or monopoly, 155, 163.
cutting grass produced by overflow, 154.
change of purpose:
limitation on, that no one is injured by the change, 219, sec. 148.
distinction between change of purpose and change of place of use, 218, 219.
early view concerning, 218.
priority not lost on, 219, 220.
on sale of water right, purchaser using water for new purpose, 219.
examples of changes, 154.
sawmill to grist-mill, 219.
placer mining to quartz mining, 219.
power to irrigation, 219.
quartz mining to motive power, 220.

QUALITY. See Pollution.
QUANTITY OF WATER.
limitations on, 210, sec. 138.
considerations governing, 204.
no more than originally claimed, sec. 139.
determination of, before California code, 204.
means and purpose indicate, 190, 204.
determination of, appropriator by actual diversion, 204.
notice or application for permit fixes maximum, 204.
no more than capacity of ditch, sec. 140.
capacity of ditch of less than amount claimed is limit, 205.

[References are to Pages.]

QUANTITY OF WATER (Continued).
reasonable time after completion of ditch for removal of boulders and other obstructions, 205.
measurement of capacity of ditch, 205.
beneficial use limits, 190, sec. 141.
if less is used than diverted, right limited to amount diverted, 205.
how actually used is calculated, 205.
amount lost in necessary fluming added to, 205.
pipe-line, 306.
watering garden patch cannot be found claim to irrigate farm, 206.
injunction decree must be based on beneficial use, 206.
surplus over beneficial use not included in appropriation, 161.
quantity for future needs in irrigation. See Future Needs.
in times of scarcity
prior appropriator supplied in full, 207.
subsequent appropriators bear loss, 207.
appropriation and riparian rights contrasted, 207.
apportioning among riparian proprietors in times of scarcity, 207.
streams drying up in summer, 207.
irrigation in dry season, 207.
prior appropriator supplied in full, 207.
apportioning water by time, 208.
appropriation of whole stream, sec. 142.
in times of scarcity under irrigation codes:
preference to domestic use, 208.
preference to irrigation, 208.
preference to mining in mining districts—in Idaho, 209.
special provisions for times of scarcity, irrigation codes, 207, 208. See, also, Preferences and Pro-rating.
under common law of riparian rights
what is reasonable quantity, a question of fact, 297.
reasonable quantity for artificial uses, 297.
for irrigation, 298.
difficulty in determining quantity to be recaptured, 264.
enlargement of amount, 209.
amount for irrigation, 46, 211.
limitation on, of water for irrigation under irrigation codes, 332. See Irrigation; Maximum.
what diminution of, or deterioration in quality is an invasion of the right, 222.

[References are to Pages.]

QUANTITY OF WATER (Continued).
summary of rules concerning, to which appropriator is entitled, sec. 147.
apportioning during irrigating season, 206.
rights of first appropriators, 206.
in suit between many claimants, quantity for each must be specifically found by the court, 246.
notice of appropriation places limit on, 148.
sale of water right does not mean delivery of any specific, 83.
QUARTZ MINING. See Mining.
change of use from placer to, 219.
QUESTIONS OF FACT.
what is an unreasonable delay is a, 267.
abandonment is, for jury, 263, 268.
appurtenance is, 181.
abandonment is voluntary, and a, 263.
what constitutes riparian land, is a, 299.
reasonable quantity for riparian use, is, 297.
diligence is, 157.
QUIETING TITLE. See Adjustment of Priorities; Apportioning.
actions to, to water right, sec. 169.
to underground water, 245.
right of landowner to underground water though he has sunk no well, 246.
of many claimants on stream, 246.
to determine rights on stream, all claimants must be in court, 246.
court must make for each specific finding of amount, 246.
irrigation a prolific source of litigation, 246.
California decree adjusting rights, must be certain, 246.
apportionment by time, between appropriators, 246.
apportioning for days or hours among appropriators, 246.
apportionment in times of scarcity, 247.
no preference in apportioning, 247.
on interstate stream, 119.
QUI PRIOR EST IN TEMPORE, etc.
maxim governing appropriation, 10, 12, 70, 80.

RAIN—RAIN WATERS. See Surface Water.
law of, 115, 129.
heavy rains, 72, note.
prevention of work by, 156.
RAILWAY GRANTS.
appropriation on forfeited, 99.
riparian rights of, 78.
subject to prior appropriations, 76.

[References are to Pages.]

RATIFICATION.
of Wyoming law by Congress, 63.
RAVINE.
as artificial watercourse, sec. 133.
as link in ditch line, 198.
water flowing in, 115.
REAL ESTATE. See Land.
water right is, 186, 282, sec. 44.
not personalty, 88.
justice of peace has no jurisdiction, 88.
statute of frauds applies, 88.
statute of limitations as to land, 88.
recording statutes apply, 88.
riparian right is. See Riparian Rights.
whether water in canal is, 195.
ditch is, 191.
REASONABLE TIME. See Diligence; Non-user; Time.
REASONABLE DILIGENCE. See Diligence.
REASONABLE USE. See Riparian Rights.
under riparian rights, 222.
what is reasonable quantity under riparian rights a question of fact, 297.
manner of use under riparian right, 300.
irrigation is, under law of riparian rights, 291.
RECAPTURE.
of water turned into natural stream, 84, 188, 263, sec. 187.
of waste water, 264, 270, 276.
stream as link in ditch line, 264.
intent to, prevents abandonment, 264, 270.
difficulty in determining quantity recaptured, 264.
evidence in cases of, 264.
burden of proof in cases of, 264.
of water developed by tunnel, 265.
of water from clearing channel, 265.
RECENT LEGISLATION. See Legislation.
RECLAIMING. See Recapture.
RECLAMATION DISTRICTS.
for drainage of swamp land, 122, 123.
influencing law of irrigation districts, 44.
RECORDING.
notice of appropriation must be recorded, 147.
of notice preserves evidence, 148.
of sale of water right, 88, 180.
of applications for permit, in office of State Engineer, 171.
of certificate of appropriation, 174.

[References are to Pages.]

RECORDING (Continued).
of certificate of priority, 258, 260.
of water license, 174.
RECOVERY. See Measure of Damages.
REFEREE. See Adjudication of Priorities.
REFUSE. See Crimes; Pollution.
from hotel, 239.
REGULATIONS. See Administration.
rules and, for supervision of State, 252.
rules and, for supervision of water districts under irrigation codes, 254.
police, under irrigation codes, sec. 177.
RELATION, DOCTRINE OF.
doctrine stated, 116, 167.
origin and purpose of doctrine, 106, 140, 145, 152, sec. 107.
based on early customs, 145.
pioneer case, 162.
preserved by legislation:
Civil Code of California, section 1418, 164.
irrigation codes, 165, 174.
scope of doctrine:
to prevent "dog in manger," speculation, etc., 145.
to fix date and details when right ripens, 140, 141, sec. 88.
protects *bona fide* appropriator during construction work, 145.
operation of doctrine, 152, 169, sec. 108. See Method of Appropriating.
right on completion relates back to beginning, 150.
when doctrine can be invoked, 163, 166.
acts as a kind of option, 163.
not act as a condition subsequent, 163.
four requisites to invoking stated, 145, 146, sec. 88.
actual application of water to use not a requisite, 165, 166.
as applied to underground water, 128, 153.
to what time right relates back, 141, 148, 162, 165.
to posting notice, 148.
where two notices posted, 164.
where no notice posted, 165.
early Nevada rule, 165.
under irrigation codes, 165.
to filing application for permit, 174.
evidenced by numbers, 174.
between rival claimants, 141, 150, 151.

[References are to Pages.]

RELATION, DOCTRINE OF (Continued).
forfeiture of benefit of relation. See Actual Diversion; Forfeiture.
by failure to post notice. See Notice of Appropriation.
by failure of diligence, 158. See Diligence.
by failure to complete works. See Completion of Work.
using works abandoned by or belonging to others, 160, 161.
RELATION TO GOVERNMENT. See California Doctrine; Colorado Doctrine.
RELATION TO OTHER APPROPRIATORS. See Appropriator; Priority, etc.
RELATION TO RIPARIAN PROPRIETORS. See California Doctrine; Colorado Doctrine; Priority; Riparian Rights; Settlers, etc.
REMEDIES. See Action; Proceeding; Suit.
REPAIR.
of ditches, 74, sec. 135.
ditch owner has duty of, and not landowner, 201, 203, 216.
ditch owner has right of entry to make, 201, 216.
landowner cannot remove support of ditch, 201.
landowner may use land in ordinary way though ditch injured thereby, 201.
sheep trampling a ditch, 201.
where ditch crosses ditch, 201.
subsequent claimant must adjust crossing over prior ditch, 201.
REQUISITES.
of California method of appropriating, 146.
of watercourse, sec. 65.
of appropriation are equivalent to taking possession of water, 139.
of notice under early customs, 146.
of appropriation by actual diversion, 141.
RESERVATION. See Conveyance; Sale.
of riparian rights on sale of land, 294.
RESERVOIR.
for speculation, 155.
underground, sec. 79.
Kansas statute, 134, note.
taken on eminent domain, 132.
as nuisance, 74.
for irrigation, early protection of, 18.
injury to, 250.
Colorado provisions concerning, 338.
water in, or pipes, is personal property, 195.
poisoning water in spring or, 250.

[References are to Pages.]

RESERVOIR (Continued).
Colorado form of, filing, 418.
not built at appropriator's peril, 202.
Utah statute concerning, 382.
application for permit to build, 507, 511.
RES IPSA LOQUITUR, 201. See Negligence.
RETURN OF SURPLUS.
necessity for, by riparian proprietor, sec. 220.
REVERSIONER.
suit by, to protect water right, 302.
REVISED STATUTES OF UNITED STATES. See Legislation; Federal Statutes.
REVIVAL.
of abandoned water right by sale, 263.
RIGHT OF ENTRY.
ditch owner has, to repair, 216.
RIGHT OF PROPERTY.
indicated by possession and acts of ownership, 162.
RIGHT OF WAY. See Ditches, etc.
grant of, over public lands, 20.
is essence of ditch right, 192.
RIPARIAN LAND.
use on non-riparian not allowed at common law, 299.
cannot use water to irrigate, under common law, 19.
what is, title not the test, 299.
purchase of by appropriator, rights on, 93, 94, 191.
appropriation on, 93. See Private Land.
RIPARIAN PROPRIETOR. See Riparian Rights; Settlers.
appropriation by, 33, 92, 94, sec. 50. See Appropriator.
alone could divert streams at common law, 8.
rights of under early Mexican law, 4.
legislation of California upholding, 34.
relation of appropriator to, 76. See California Doctrine.
California doctrine protects if prior in time, 77, 78.
Colorado doctrine rejects rights of, 78.
United States as, 50, 62, 294.
change by appropriator injuring, 215.
estoppel of, 303.
apportionment among, in times of scarcity, 207.
purchase from, by appropriator, 93, 94.
appropriation by, great advantage of, 101
adverse use against, 303.
RIPARIAN RIGHTS. See Common Law; Settlers, etc.
upheld in nine States, 37.
rejected in seven States and Territories, 37.

[References are to Pages.]

RIPARIAN RIGHTS (Continued).
in supreme court of United States, 37.
statement of doctrine, 12, c. XIII.
practicability of in West:
whether hostile to irrigation, 28 et seq.
under California doctrine, thought beneficial, 29.
under Colorado doctrine, thought inimical, 28.
not adapted to new or rough regions, 31.
in arid States impracticable, 28.
strength of feeling involved, 29, 30.
unsuited to pioneer conditions, 5.
irrigation is a reasonable use under riparian rights, 291.
under Colorado doctrine, rejected *in toto:*
hostility to riparian rights, 28.
rejected under, 37, 55, 78.
States following Colorado doctrine, 37.
under California doctrine, protected, 77.
States following California doctrine, 37.
protected on constitutional principles, 35, 62 et seq.
appropriation and common law stand side by side, 36.
are independent, 12.
are not blended into one, 7.
appropriation is not deduced from riparian rights, 12.
not affected by repeal of Civil Code of California, section 1422, 36, 320.
relation between appropriators and riparian proprietors:
priority governs, sec. 33 et seq.
subsequent settlers subject to prior appropriation, 76.
prior settlers have riparian rights, 78, 291.
where riparian rights attach. See Settlers.
to Mexican grants, 35, 80.
riparian rights of cities, 95.
lakes and ponds, 294.
mining claims, 33, 80.
on interstate streams, 118.
to sub-flow of stream, 118.
mere possession of public land, 81.
in specific localities. See Rivers.
before Lux v. Haggin:
decisions upholding, 33.
thought rejected in California, 33.
Civil Code of California concerning, 34.
upheld in Nevada, 34, 359.
as affected by irrigation codes:
previously acquired, remain, 42, 43.

[References are to Pages.]

RIPARIAN RIGHTS (Continued).
cannot be acquired thereafter, 43.
nature of riparian right:
not an easement, but parcel of land, sec. 209.
whether a matter of local law, 65, note.
whether hostile to irrigation, 29.
foundation of right, 7, 8.
only riparian proprietor can divert stream under, 8.
riparian proprietor owns bed to middle of stream, 8, 293.
need not merge with appropriation, 93.
a natural right, 292.
passes *ipso facto* on sale of land, 292.
warranty deed of land warrants, 292.
is usufructuary, 293.
right to fish, 293.
title to bed of stream, 293.
contracts concerning, 293.
severance from land, 293.
United States as riparian proprietor, 294.
riparian rights and underground water, 294.
in underground streams, 294.
landowner's right to percolating water, 294.
ownership of *corpus* of percolating water, 295.
natural uses under the law of, 296.
household use, drinking, watering domestic animals under law of, 296.
may take whole stream for natural uses, 296.
artificial uses under riparian rights, 296.
irrigation and running machinery, 296.
what is reasonable quantity for, a question of fact, 297.
frontages of stream not measure of, 297.
determination of amount for irrigation under, 298.
apportioning in times of scarcity under, 298.
apportionment by time, 298, 299.
apportioning percolating water, 299
riparian right cannot be used on non-riparian land, 299.
cannot irrigate non-riparian land, 299.
what constitutes riparian land a question of fact, 299.
title to land not test of being riparian, 299.
taking water beyond watershed, 299.
return of surplus by riparian owner, 300.
reasonable manner of use under riparian right, 300.
no waste, 300.
pumping water, 300.
pollution, 301.

[References are to Pages.]

RIPARIAN RIGHTS (Continued).
necessity of damage for injunction, 301.
injunction to riparian owner who is not using water, 301.
loss of riparian right, 302.
remain though water put to no use, 303.
adverse use of, 303.
estoppel or prescription below against upper riparian owner, 303.
eminent domain, 304.
loss of, by natural causes, 304.
constitutional provisions hostile to, 63.
legislation hostile to:
Arizona, 41, 334.
Colorado, 335.
Idaho, 339.
Nebraska, 348.
Nevada, 354.
New Mexico, 361.
North Dakota, 363.
Oklahoma, 367.
South Dakota, 373.
Utah, 378.
no riparian rights in artificial watercourse, 196.
reasonable use under, 222.
riparian rights recognized in one State practiced on whole interstate stream, 118.
riparian rights of United States, 50, c, 11.
RIVERS. See Streams; Watercourse.
navigable, may be appropriated, 116.
Truckee river, 117.
San Gabriel river, 128.
Walker river, 117.
Yuba river, 149.
Jackson creek, 264.
Kern river, 34.
overflow of, from mining debris. See Debris.
interstate. See Interstate Streams.
drained by mines, 231.

SALE. See Appurtenance; Conveyance; Deed, etc.
formalities on sale:
must be in writing within statute of frauds, 180.
parol evidence to prove, effect of, 185.
must be recorded, 180.
complete on deed and delivery of possession, 180.

[References are to Pages.]

SALE (Continued).
under irrigation codes approval of State Engineer sometimes required, 181.
effect of sale:
does not mean delivery of any specific quantity of water, 83.
change of use on sale, 219.
does not cause loss of priority if in writing, 164.
causes loss of priority if parol, 185.
of surplus one does not need passes nothing, 181.
of water right in parts, 180.
no revival of abandoned water right by sale, 263.
riparian right passes *ipso facto* with land, 292.
right of suit by grantee for diversion antedating sale, 180.
in particular cases:
on partition between tenants in common, 92, 240.
by homestead claimant before final proceedings, 179.
on execution, 180.
on foreclosure of mortgages or liens, 204.
by Indians, 179.
of water right separate from land, 181.
appurtenances passing on sale, 181, 203. See Appurtenance.
water may be appropriated for sale, 155.
water appropriated for sale is an article of commerce, 195.
of land as affecting water right, 21. See Appurtenance, etc.
SAN GABRIEL RIVER, 132.
SAN JOAQUIN RIVER, 116.
SAN RAFAEL.
water supply of, 229, note.
SATURATION. See Percolating Water.
plane of, of underground water, 132.
land saturated with water, 132.
SAWMILL.
injury from, 223.
pollution by, 235, 238, note.
change of use from, to grist-mill, 219.
appropriation for, 17, 74.
SCARCITY. See Preferences; Quantity.
in times of, apportionment of water, 75.
pro-rating under irrigation codes in time of, 207.
apportioning among riparian proprietors, 201.
SEASON. See Preferences; Quantity, etc.
dry season, 207.
irrigation in, 207.
crops and underground water in, 226, 231.
appropriation during, 73.

[References are to Pages.]

SEASON (Continued).
irrigation season, appropriation during, 206.
of high water, damage in, 202.
SECOND-FOOT. See Measurement of Water.
SEEPAGE. See Percolating Water.
caused by burrowing animal, 203.
tunnel diverting seepage from stream, 226.
damage from, 201.
from ditch, whether waste, 191.
through bed and banks of stream, 129.
seepage tunnel tapping saturated bed of stream, 132.
SETTLERS UPON PUBLIC LAND. See California Doctrine; Public Lands; Riparian Rights, etc.
injury to, by appropriators, 20.
agricultural settlers in mining regions, 77, note.
rights of prior settlers:
under California doctrine, have riparian rights, 35, 77, 78.
under Mexican grants, 80.
after patent to land, 80, sec. 35.
before patent to land, sec. 36.
protected from entry in land office, 80.
mining claim has riparian rights, 80.
no riparian rights from naked possession, 81.
being first in time, are first in right, 79.
must return surplus for subsequent appropriators, 79.
under Colorado doctrine, have no water right if they do not appropriate, 78.
subsequent settlers
have tenements of their own selection, 8.
take subject to prior appropriations, 76, 143, sec. 33.
prior appropriations expressly excepted out of patent, 77, note.
railway grants, 76.
homestead, 76.
mining claims, 76.
have, under California doctrine, riparian rights in surplus over prior appropriations, 78.
settlement on public land not *per se* an appropriation, 37, sec. 87.
diligence required of, in applying water to irrigation. See Future Needs.
right of, to percolating water, 151. See Percolating Water.
SEVERANCE.
of water from natural stream, 83, 270.
of water right and channel by sale, 84.
of riparian right from land, 293.

[References are to Pages.]

SEWAGE.
city, injunction against, 301.
SHAFT. See Mining.
SHEEP.
trampling a ditch, 201.
defiling a stream, 250.
SHIFTING OF STREAM.
from natural causes, 85, 304.
SICKNESS.
prevention of work by, 156. See Diligence.
SILENCE.
does not forfeit right, 284.
raises no estoppel, 285.
SLUICE MINING.
pollution by, enjoined, 236.
SNOW.
prevention of work by, 156. See Diligence.
water from rain or melting snow, 115.
damage from melting snow, 202.
SOIL.
water infiltrating through, 129.
SOUTH DAKOTA.
enforces common law of riparian rights, 36, 37.
statutes of:
declaration of State ownership, 373.
concerning riparian rights, 373.
administration, 373.
determination of existing priorities, 274.
method of appropriating, 374.
measurement of water, 375.
miscellaneous provisions, 375.
SOUTHERN CALIFORNIA.
peculiar geological conditions connected with underground water, 113.
where percolating water of importance in, 133.
tunnels developing water in, 230, note.
SOVEREIGNTY.
over public lands. See Public Lands, etc.
SPECIFIC PERFORMANCE. See Contract; Equity.
of parol contract, part performance, 183.
SPECULATION.
reservoir for, 155.
appropriation for, is not allowed, 155, 163.
buying up rights for, will not support injunction, 244.

[References are to Pages.]

SPRING. See Percolating Water; Watercourse.
piping off, 130.
ditching to very mouth of, 130.
tunnels drying up, 130.
water from, is watercourse, 130.
water from, 114.
diversion of percolations from, 226, 229, note.
drained by mine, 227.
fouling water in, is a crime, 250.
SQUATTER.
water right of, 187.
STAMP-MILL. See Mining.
tailings from, injunction, 238.
STATE. See California Doctrine; Colorado Doctrine; United States.
jurisdiction of, over waters, 25.
waters as property of, 60, 68.
own swamp lands, 98, 121.
suit in one, for diversion in another, 119, 240.
power to change law of waters, 62.
ditch lying in two States, 194.
over interstate streams. See Interstate Streams.
National Irrigation Act subordinate to, 43.
organization of, for administrative purposes. See Administration.
jurisdiction of, compared with that of United States:
derivation of rights from, instead of United States-Colorado doctrine, 55, 163.
declaration that waters are property of State, 335, 339, 353, 361, 373, 378, sec. 173.
derivation of rights from United States-California doctrine: not derived from State, 51, 54.
legislative power of, over waters, 67.
police power is proper field, 54.
constitutional limitations on, 54, 65.
early policy of, in California, 10.
State constitutional provisions affecting common law, 60.
appropriations on State lands, 98.
swamp lands, 98.
States enforcing riparian rights, 36, 37.
States rejecting riparian rights *in toto*, 37.
States providing for irrigation districts, 46.
States having irrigation codes, sec. 20.
States having constitutional provisions affecting common law, 60.
separate rule for separate parts of State, 135.
appropriation in one for use in another, 118.

[References are to Pages.]

STATE (Continued).
suit by, as *parens patriae*, 241.
suit against, for diversion, 241.

STATE ENGINEER. See Administration.
legislation desired by, 40, note.
appeal from decision of, 171.
examination by, of actual use, 174.
necessity for approval of, on sale of water right, 181.
discretion of, 171, 173.
indorsement of, on application, 171.
determination of priorities by, 257, sec. 179.
examination by, 171, 173.
preparatory steps in determining priorities by board or, sec. 179.
association of State Engineers, 40, note.
notice of investigation by, 257.
recording all papers in general with, 171.
recording application in office of, 171.
notice of, survey by, 280.
fees of:
Colorado, 424.
Idaho, 345.
Nebraska, 351.
Nevada, 462.
North Dakota, 365.
Oregon, 371.
Utah, 383, 489.

STATUTES. See Federal Statutes; Irrigation Codes; Legislation; and under names of individual States.
constitutionality of. See Constitutional Law.
prevail over customs or decisions, 26.
territorial as well as State sanctioned by Act of Congress, 26.
hostile to common law. See Legislation, etc.
Arizona only statute naming and rejecting riparian rights, 41, 334.
of arid States. See Arid States; Irrigation Codes, etc.
forfeiture for non-compliance with, 141, 272. See Forfeiture.
for specific purposes.
adopting common law in California (Act of April, 1850), 6, 11, 13, 16.
adopting customs of miners in California, 6, 11, 13.
establishing irrigation codes. See Irrigation Codes.
establishing irrigation districts, 44, 325. See Irrigation Districts.
for adjudicating existing priorities, purely statutory, 257, 261.

[References are to Pages.]

STATUTES (Continued).
for eminent domain—constitutionality of, 286. See Eminent Domain.
prohibiting monopolies, not apply to appropriation, 206.
fixing miner's inch, 148. See Miner's Inch.
registry acts. See Recording.
particular acts:
National Irrigation Act, 43, 311.
Wright Act. See California.
Indemnity Act. See California.
Carey Act, 310.
recent statutes:
legislation of 1905, 39.
chiefly administrative, 39.
essentials, of, 40.
scope and purpose of, 331 et seq.
statutes of
United States, 19, 52, 55, 63, 97, 223. See Federal Statutes.
Arizona, 334.
California, 26, 310.
Colorado, 335.
Idaho, 339.
Kansas, 346.
Montana, 347.
Nebraska, 348.
Nevada, 353.
New Mexico, 361.
North Dakota, 363.
Oklahoma, 367.
Oregon, 370.
Philippine Islands, 410.
South Dakota, 373.
Texas, 377.
Utah, 378.
Utah Irrigation Code in full, 384.
Washington, 406.
Wyoming, 407.

STATUTE OF FRAUDS. See Parol Sale.
contract to furnish water at all times, 204.
contract not to be performed within year, 204.
parol sale, 183.
requires writing on sale, 180.
and possessory rights on public domain, 184.
applies to conveyances of water rights, 88, 143.
part performance, in equity, 183.

[References are to Pages.]

STATUTE OF LIMITATIONS. See Adverse Use.
concerning land, applies to water right, 88, 180.
not run against United States, 140.
STEALING WATER. See Crimes.
STOPPAGE OF USE. See Interruption.
temporary, 74.
STRANGERS TO SUIT. See Parties; Suit.
rights of, cannot be considered, 106, 161.
STORAGE. See Reservoir.
STREAMS. See Rivers; Sub-flow; Watercourse.
what constitutes, sec. 65. See Watercourse.
intermittent streams, 124.
navigable, rights in, 116, sec. 66.
may be appropriated, 116.
State owns bed of, 116.
interstate streams. See Interstate Streams.
State boundaries no barriers to appropriation of, 117.
conflict of laws, 118.
may be appropriated, 118.
in one State for use in another, 118.
regardless of declaration that State owns waters, 119, note.
riparian rights on, protected in all States, 118.
suit in one State for diversion in another, 119.
quieting title to rights on, 119.
original jurisdiction of supreme court of United States in case of, 119.
underground supply of. See Percolating Water; Sub-flow of Streams, etc.
percolations feeding, diversion of, 130, 226.
tunnel cutting off supply of, 129, 230.
diversion of ground water drying up stream, 226.
restoring amount diverted prevents injunction, 242.
drying up in summer, 304.
bed of, title to, 293. See Channel.
frontage on, 297. See Riparian Rights.
whole stream, appropriation of, sec. 142. See Quantity of Water.
ceasing to flow, 267, 304.
underground streams. See Underground Streams.
mere settlement on banks not *per se* an appropriation, 127.
pollution of. See Pollution.
defiling by herding sheep, 250.
depositing tailings in, 236, note.
muddying stream, 236.

[References are to Pages.]

STREAMS (Continued).
water from ditch emptying into, 218, 272.
obstructions in, 255.
water severed from, is personalty, 270.
SUB-FLOW OF STREAMS. See Percolating Water; Underground Water.
defined, sec. 75.
a valuable portion of stream, 126.
percolating from stream, 130.
recognition of, at law, 125.
velocity of, 126.
is part of stream, 126.
evidence of, 126.
pioneer case, 126.
appropriation of:
may be appropriated, sec. 76.
by a tunnel, 127, 128.
appropriation of stream is appropriation of sub-flow, 127.
priority governs, 127, 129.
notice of appropriation of, 128, 413.
doctrine of relation applied to, 128.
rights of surface claimants to:
right of riparian owners to, 127, 128.
prior surface claimants have better right, 128.
diversion of:
mine shaft withdrawing, 230.
subterranean tapping of stream, 127.
by tunnel, 127.
uncertainty of damage, 129.
restoring amount diverted prevents injunction, 242.
SUBMERGED CANYONS.
basins holding underground water, 133.
SUBSEQUENT APPROPRIATOR. See Appropriator.
SUBSEQUENT SETTLERS. See Appropriators; Settlers.
SUB-SURFACE DAM, 132.
SUBTERRANEAN WATER. See Underground Water.
SUCCESSIVE APPROPRIATORS. See Appropriator.
relation between, 81, 70 et seq.
SUCCESSOR IN INTEREST, 184. See Sale.
SUIT. See Action; Parties, etc.
jurisdiction of Federal courts, 241.
by State as *parens patriae*, 241.
against State for diversion, 241.

[References are to Pages.]

SUIT (Continued).
original jurisdiction of supreme court of United States, 241.
in one State for diversion in another, 119, 240.
where ditch lies in two States, 194, 240.
in one county for diversion in another, 240.
where ditch lies in two counties, 194, 240.
for adjudicating priorities, in whose name brought, 259. See Adjudication.
for specific performance, parties to, 183. See Equity.
to determine rights of many claimants on stream, 246. See Apportioning; Quieting Title.
rights of people not parties to, cannot be set up, 106, 240.
by tenant in common, 240.
partition, 240.
against stranger, 240.
by reversioner, 302.
by landlord against stranger, 240.
by tenant against stranger, 240.
SUMMER. See Quantity of Water; Season.
streams drying up in, 207.
SUPERVISION OF APPROPRIATORS.
under irrigation codes. See Administration.
SUPPORT.
for ditch, 201.
SUPREME COURT OF UNITED STATES.
latest expression of, on appropriation, 67. (See Footnote.)
original jurisdiction of, in case of interstate stream, 119, 241.
California doctrine applied by, 37.
and possessory rights, 184.
SURFACE WATER.
diffused, secs. 64, 69.
underground water compared with, 124.
surface drainage, 115.
in surface watercourse. See Streams; Watercourse.
diffused, owned by landowner, 120.
diffused, cannot be appropriated, 120.
SURPLUS. See Appropriators.
riparian rights in, over prior appropriation, 78, 291.
sale of, one does not need, passes nothing, 181.
no rights to, one does not need, 161, 181.

NOTE.—The latest expression of the supreme court of the United States will be found in Clark v. Nash, 198 U. S. 361. That volume had not appeared at the time this book went to press.

[References are to Pages.]

SURPLUS (Continued).
no adverse use from use of, against riparian owner, 303.
appropriation of, over riparian rights, 291.
use of, not adverse, 280.
measured by time, 72. See Periodical Appropriation.
SURRENDER.
and admittance, 265.
SURVEY, 157, 163.
notice of, by State Engineer, 258.
by division superintendent, 257.
departure from line of, 162.
SUTRO TUNNEL.
water from, 196, note, 197.
SWALE, 115.
SWAMP LANDS. See Reclamation District.
owned by State under Arkansas Act, 98, 121.
reclamation districts for drainage of, 44, 122.
discretion of board of supervisors in organization of reclamation district, 123.

TACKING.
by appropriators, 160.
TAHOE, LAKE, 117.
TAILINGS. See Debris; Mining; Pollution.
not a nuisance *per se*, 236, note.
dependence of mining on use of streams for, 236, note.
channel as a natural outlet for discharge of, by miners, 236.
prior right to rush, in ditch, 239.
priority sanctioning rushing across land in a ditch, 238.
depositing in streams, 236, note.
power company interfered with by, 238.
protection of prior appropriator against, 236, note.
prior location of land for depositing, 238.
protection of tail-race, 235.
from stamp-mill, 238.
from sluice mining, 236.
from hydraulic mining. See Debris.
pollution of stream by, 235. See Pollution.
TAXES.
payment of, for adverse use, sec. 202.
burden of proof, 282.
payment of, as influencing abandonment, 274.
TEMPORARY APPROPRIATION. See Appropriator.
ceases *ipso facto*, 74, 164, 168.
during temporary stoppage of prior appropriator's use, 74.

[References are to Pages.]

TEMPORARY APPROPRIATION (Continued).
between commencing and completion of another's work, 73, 150.
during another's construction work, 73, 151.
temporary non-user, 267.
when can be made, 150, 154, 267, 275, sec. 31.

TENANT. See Landlord and Tenant.
no tenancy can exist in water rights, 89.

TENANTS IN COMMON.
partition suit between, 240.
suit by one against co-tenant, 240.
suit by one against stranger, 240.
appropriation by, 180, 247, sec. 49.

TENEMENT. See Easement; Lands, etc.

TERRITORY. See State.
power of, to legislate upon waters, 26, 67.
Federal statutes sanction laws of, 67.
corporation formed under laws of, may appropriate, 95.

TEXAS,
statutes of, 377.
enforces common law of riparian rights, 37.

THIRD PERSON. See Appropriator; Parties.
rights of, cannot be set up. See Suit.
tortious act of, cannot cause abandonment, 267.
tunneling by, non-user resulting from, 267.

TIME. See Abandonment; Forfeiture.
reasonable time:
failure to use water in, is abandonment, 210. See Abandonment.
difficulty of rule, 269.
for clearing out ditch, 205.
for actual application of water to use, 165, 210.
for future needs, 210. See Future Needs.
lapse of time, 275.
length of, for adverse use, 279.
for beginning work, 146, 172.
for actual application of water to use. See Actual Application.
fixed in decree of court, 213. See Adjudication of Priority.
limit of non-user under irrigation codes, 277.
time fixed in permit to appropriate, 213.
times of scarcity. See Apportionment; Preferences; Scarcity.
under irrigation codes, 208.
under common law of riparian rights, 298.
apportionment in, 75, 208, 246, 247.

[References are to Pages.]

TIME (Continued).
appropriation measured by, 72. See Periodical Appropriation.
by months, days, or parts of days, 73. See Season.
future needs must be in view at time of appropriating, 213.

TITLE.
date at which accrues by relation, 141.
quieting, to rights on interstate stream, 141.
to bed of navigable streams is in State, 116.
in place of intended use not needed, 91.
of United States to public lands. See Patent; Public Lands; Settler.
of ditch owner to water in artificial watercourse, 195.
quieting, to underground water, 246.
and adverse use, 278.
to land, not test of being riparian, 299.
parol sale confers none, but subsequent use is an appropriation by grantee, 187.
evidence of parol sale inadmissible to prove, 187.
equitable, to water rights, 183.
to bed of stream, riparian proprietor's title, 293.
by prescription. See Adverse Use.

TOWNS. See Cities.

TOWNSHIP PLAT, 516.

TRANSFER OF WATER RIGHT.
to use on different lands. See Place of Use (Change of).
under irrigation codes, 86.
on death of appropriator, 143.
application for, form of, 443.
notice of, form of, 447.

TREATY.
Guadalupe Hidalgo, 50.

TRESPASS.
appropriation cannot be initiated by, 106.
upon rights of riparian owners. See Riparian Rights.
appropriation by, rights of strangers cannot be raised, 161.
on land of settlers. See Settlers.
entry to repair not. See Repair.
putting trespassers off one's property, 249.
water appropriated by, does not become appurtenant to land, 182.
necessity no defense to action for, 244.

TRIBUTARIES.
appropriator can complain of diversion of, 84.

TRUCKEE RIVER, 117.

[References are to Pages.]

TUNNEL. See Mining; Percolating Water, etc.
appropriation or sub-flow of stream by, 127.
tapping saturated bed by, 132.
appropriation of underground water by, 128.
seepage tunnel, 129, 130.
right to develop water by, 132.
drying up springs, 130.
Southern California tunnels, 133.
diverting sub-flow of stream, 224.
diverting percolation above stream, 226.
collecting percolations for commercial purpose, 229, note.
by third person, causing non-user, 267.
Sutro Tunnel, 196, note, 197.

UNCERTAINTY.
of damages in cases involving underground water, 129.
UNCONSTITUTIONAL. See Constitutional Law.
UNDERGROUND WATER. See Percolating Water.
percolating water. See Percolating Water.
underground streams. See Underground Streams.
sub-flow of streams. See Sub-flow of Streams.
rights of landowner to, 246.
pollution of, 239, note.
quieting title to, 246.
new rule of, 129, 130, 131, 225, secs. 72, 80.
whether right to, depends on actual use, 246.
in Southern California, 133.
and public policy, 135.
compared with surface water, 124.
new rule favors irrigators, 135.
volume of, in underlying gravel, 126
appropriation of, 129.
notice of appropriation, 152, sec. 95.
dicta in Katz v. Walkinshaw, 131.
doctrine of relation applied, 128.
right to, is usufructuary solely, 153.
underground reservoir, sec. 79. See Percolating Water.
catchment basin, 132.
Kansas statute concerning, 134.
may be taken on eminent domain, 132.
underground lake, 132.
UNDERGROUND STREAMS. See Sub-flow of Stream; Watercourses, etc.
rights in, 133, secs. 73, 213.

[References are to Pages.]

UNDERGROUND STREAMS (Continued).
may be appropriated, 124, 133.
presumption against existence of, 124.
intermittent stream, 124.
riparian rights in, 294.
UNINTERRUPTED. See Adverse Use.
adverse use must be, 282.
UNITS OF MEASUREMENT. See Measurement of Water.
UNITED STATES. See State.
or grantee of its land still owns channel, 84.
or State, 54. See California Doctrine; Colorado Doctrine.
holds land like private person, 50.
California doctrine rests on grant from, 55.
grantee of. See Public Lands; Settler.
supreme court of. See Supreme Court of United States.
or State, relation of appropriator to, 8, 14.
no prescription against, 108, 140.
as sole riparian proprietor, 62, 68.
silent acquiescence of, 97.
as original owner of land and water, 50, 51, 79.
statute of limitations not run against, 108, 140.
rights of, to waters, 52, 61 et seq.
permitted diversion distinct from land, 51.
as riparian proprietor, 294.
appropriation as grant from, 294.
no adverse use against, 282.
statutes of. See Federal Statutes.
land of. See Public Lands.
silence and tacit assent of, in early days, 9, 24.
National Irrigation Act, 43, 311.
USEFULNESS. See Purpose of Appropriation.
water must be continuously used for beneficial purpose, 189.
abandonment for failure of, 189.
water right is conditional, 189, sec. 124.
general freedom in manner of use, 189.
use by water-wheels, pumps, steam boilers, hydraulic rams, permitted, 189.
appliances used immaterial, 189.
means used indicate amount appropriated, 190.
limitations on, under riparian rights, 296.
irrigation codes cover all uses of water, 260.
whether right to underground water depends on actual use, 246.
appropriator for irrigation need not have immediate use of water, 213.

[References are to Pages.]

USEFULNESS (Continued).
beneficial use as affecting adverse use, 279.
riparian rights remain though water put to no use, 303.
USE OF WATER. See Actual Application; Actual Diversion; Artificial Uses; Manner of Use; Means of Use; Place of Diversion; Place of Use; Purpose of Use; Non-user; Waste, etc.
USUFRUCTUARY.
riparian right is, 293, see. 210.
appropriation is, 61, 153, 163, see. 38.
definition of, see. 38.
underground water; right to is, 153, 295.
UTAH.
common law rejected in, 36, 37.
the law of appropriation in, 37, 58.
statutes of, 378.
declaration of State ownership, 278.
concerning riparian rights, 378.
administration, 378.
determination of existing priorities, 379.
method of appropriating, 381.
concerning reservoirs, 382.
preference and pro-rating, 382.
measurement of water, 283.
State Engineer's fees, 283.
irrigation district, 383.
Utah Irrigation Code in full, 284.
forms in use in, 485.
application for permit to appropriate, 485, 492.
certificate of appropriation, 498.
etc. See Forms.

VALUE.
of percolating water, none under old rule, 134.
VELOCITY.
of sub-flow of stream, 126.
VERBAL SALE. See Parol Sale.
VIS MAJOR.
damage from, 202.
and percolating water, 231.
VOLUME.
of sub-flow of stream is greater than surface flow, 126.
subterranean, flowing through underlying gravel, 126.

WAIVER.
of benefit of relation by failure to post notice, 151.

[References are to Pages.]

WALKER RIVER, 117.

WARNING.
notice operates as, sec. 92.

WARRANTY. See Deed.

WASHINGTON.
statutes of, 406.
appropriation in, 138.
enforces common law, following California doctrine, 37.

WASTE. See Abandonment.
waste not countenanced, 60, 83, 94, 153, 190, 206, sec. 127.
diversion for, is not a beneficial purpose, 190.
beneficial use limits purpose, 190.
use limits amount, 190.
injunction against, 190.
appropriator buying up riparian land must not waste, 191.
on change of use, 191.
under riparian right, 300.
what constitutes waste:
spreading out water for cattle to wallow in, 190.
ditch causing more loss in transmission than pipe-line not waste, 191.
evaporation and seepage from ditch may be, 191.
failure to furrow land before irrigating is not waste, 191.
legislative definition of waste, 333.
abandonment of waste. See Abandonment.
water that runs off after use is abandoned, 264, 270, 271.
right of others to appropriate waste water, 48, 196.
building expensive flumes to catch, gives no right, 271.
where discharged into natural stream, 272.
becomes part of stream by accession, 272.
change of place of discharge, 218, 272.
right of others to, by estoppel or prescription, 271.
from an artificial watercourse, 270.
intent to reclaim or recapture, 270. See Recapture.
water in drainage ditch is abandoned, 270.
ceasing abandonment of, 270, 271.
water pumped from mine, 197.

WATERS.
power of United States to deal with, 52.
subterranean. See Underground Waters.
declared property of public or State, 55.
as incident to land, 52.
in mining, essential, in early days, 9.

[References are to Pages.]

WATER COMMISSIONERS. See Administration.
under irrigation codes, 254.
in California, 324.

WATERCOURSE. See Rivers; Streams; Sub-flow of Stream; Underground Streams.
definition of, sec. 65.
what constitutes, sec. 65.
channel necessary, 114.
bed and banks, 115.
swales, 115.
water from rain or melting snow, 115.
water from freshets, 115.
depressions in prairies, 115.
tendency to regular flow necessary, 114.
usually dry channel, 114.
continual flow unnecessary, 115.
chance flow, 114.
no presumption of flow, 114.
water from springs, 114, 130.
intermittent streams, 124.
sub-flow is part of, 126. See Sub-flow of Stream.
taking on eminent domain. See Eminent Domain.
navigable, interstate, etc. See Streams.
artificial watercourse, sec. 68. See Artificial Watercourse.

WATER DISTRICTS. See Administration.
regulation for supervision of, 254, 256.

WATER DIVISIONS. See Administration.
superintendents of, under irrigation codes, 253, 258.
survey of streams in, 257.

WATERING STOCK.
appropriation for, 47.
under common law of riparian rights, 296, 297.

WATER LEVEL.
in wells, 226.
inclines toward mine shaft, 231.

WATERSHED.
taking water beyond, under riparian rights, 299.

WATER SUPPLY, PUBLIC.
percolating water for, 229, note.
is a public use, 287.
parol contract for, 204.

WATER USERS' ASSOCIATION, 314.

[References are to Pages.]

WATER-WHEEL.
current wheel as an appropriation, 160.
use of, 72, note, 189.

WELLS.
level of water in, 226.
diversion of percolating water from, 225.
landowner's right to dig, 295.
appropriation of water by, 131.
location of, in Southern California, 133.

WHERE AN APPROPRIATION CAN BE MADE. See Place of Diversion.

WHERE SUIT CAN BE BROUGHT. See Suit.

WHO CAN APPROPRIATE. See Appropriator.

WHO CAN SUE. See Parties.

WHOLE STREAM. See Quantity of Water.

WORK.
commencement of, right relates back to, 150.
completion of. See Completion.
construction work. See Construction Work.
delay caused by magnitude of, 146, 149.
use of water during, 72, 151.
diligence in. See Diligence.

WRIGHT ACT. See Irrigation Districts.
constitutionality of, 44.
adopted in various States, 46.

WRITING. See Statute of Frauds.

WYOMING.
admission of, into Union, effect on law of waters, 63.
statutes of:
declaration of State ownership, 407.
concerning riparian rights, 407.
administration, 407.
determination of existing priorities, 408.
method of appropriation, 408.
relation, 409.
reservoirs, 409.
measurement of water, 409.
forms used in, 500.
application for permit to appropriate, 500.
application for permit to enlarge, 503.
application for permit to build reservoir, 507, 511.
etc. See Forms.

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